HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

Rating ESG credit risk in commercial mortgage-backed securities: an assessment of legal perspectives

Author: Julia Nurminen

Supervisor: Professor Jukka Mähönen

Master's Thesis

University of Helsinki, Faculty of Law

August 2021

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

Tiivistelmä

Tiedekunta: Oikeustieteellinen

Koulutusohjelma: Oikeustieteen maisteri

Opintosuunta: Kauppaoikeus

Tekijä: Julia Nurminen

Työn nimi: ESG-seikat luottoriskinä liikekiinteistövakuudellisissa arvopapereissa: oikeudellisten näkökulmien arviointi

Työn laji: Oikeustieteen maisterin tutkielma

Kuukausi ja vuosi: Elokuu 2021

Sivumäärä: 87 + xxi

Avainsanat: ESG; luottoluokitus; arvopaperistaminen; liikekiinteistövakuudelliset arvopaperit

Ohjaaja tai ohjaajat: Professori Jukka Mähönen

Säilytyspaikka: Helsingin yliopiston kirjasto

Muita tietoja: Ei sovellu

Tiivistelmä: Tutkielma tarkastelee ESG-riskien vaikutusta liikekiinteistövakuudellisten arvopapereiden luottoluokitukseen osana regulaatioekologiaa, joka koostuu erilaisista modaliteeteista. Tutkielma arvioi oikeudellisesti sitovien ja sitomattomien luottoluokituslaitoksiin ja liikekiinteistövakuudellisten arvopapereihin kohdistuvien viitekehysten vaikuttavuutta suhteessa ESG-liitännäisten seikkojen huomioimiseen systemaattisella, yhdenmukaisella ja läpinäkyvällä tavalla Euroopan unionin kontekstissa.

Liikekiinteistövakuudellisten arvopapereiden sekä niiden luottoluokituksen kannalta oleellisten ja materiaalisten ESG-riskien tarkastelu tarjoaa seikkaperäisen mahdollisuuden tutkia ESG-luottoriskiä oikeudellisesta perspektiivistä analysoiden arvopaperistamista, ESG:tä ja luottoluokituslaitoksia, jotka linkittyvät vahvisti toisiinsa. Tutkielmassa esitettävä arviointi onkin perustavanlaatuista ottaen huomioon Euroopan unionin vallitsevat linjavedot, ESG:n liittyvän oikeudellisen epävarmuuden ja luottoluokituslaitosten epäonnistumiset niiden kvasi-regulatiivisessa portinvartijantehtävässä pääomamarkkinoilla. Tutkimuksen selvästi poikkitieteellisen luonteen takia tutkielma esittelee myös näkökulmia, jotka liittyvät vahvasti reaalitalouteen, arvopaperistamiseen ja luottoriskiin liittyviin teknisiin ja monitahoisiin seikkoihin. Siten tutkielmalla on kiinteä yhteys käytäntöön ja näin ollen oikeustieteen kykyyn säännellä käytännöstä johtuvia monimuotoisia haasteita. Siten tutkielmassa hyödynnetään pääasiallisesti polysentristä metodia.

Huolimatta siitä, että luottoluokituslaitokset ovat tunnistaneet ESG-riskien mahdollisen vaikutuksen liikekiinteistövakuudellisten arvopapereiden riskiluokitukseen, tutkimuksen kohteena olevat ja kyseisiin arvopapereihin ja niiden luottoluokittamiseen soveltuvat oikeudellisesti sitovat instrumentit eivät huomioi ESG-riskejä riittävissä määrin. Tutkielman johtopäätös onkin, että voimassa oleva regiimi ei ota ESG-liitännäisiä luottoriskielementtejä huomioon systemaattisella, yhdenmukaisella ja läpinäkyvällä tavalla.

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

Abstract

Faculty: Faculty of Law

Degree programme: Master's programme in law

Study track: Commercial law

Author: Julia Nurminen

Title: Rating ESG credit risk in commercial mortgage-backed securities: an assessment of legal perspectives

Level: Master's thesis

Month and year: August 2021

Number of pages: 87 + xxi

Keywords: ESG; credit rating; securitisation, commercial mortgage-backed securities

Supervisor: Professor Jukka Mähönen

Where deposited: University of Helsinki library

Additional information: N/A

Abstract: This paper provides an assessment of how the impact of ESG exposures on credit risk is currently perceived in commercial mortgage-backed securities in light of the applicable regulatory framework consisting of different modalities. This is done with a view of understanding whether the binding and non-binding regimes relating to credit rating agencies and commercial mortgage-backed securities have separately and together succeeded in ensuring that the impact of relevant and material ESG-related considerations are accounted for in a systematic, harmonised and transparent manner when rating the said instruments in an EU context.

The study of commercial mortgage-backed securities and relevant and material ESG exposures provide an ample opportunity to examine ESG as a credit risk from a legal viewpoint. This is because focusing on the said structured products accommodates the simultaneous legal analysis of the intertwined concepts of securitisation, ESG and credit rating agencies. Such analysis is fundamental given the conflicts between wider EU policy objectives, legal uncertainty pertaining to ESG and the failures of credit rating agencies as quasi-regulators and gatekeepers of capital markets.

Due to the interdisciplinary nature of the research presented in this paper, the discussion shall touch on matters that bear relevance in terms of real economy and the technicalities and complexities of credit risk and securitisation. Therefore, the paper positions itself at the very heart of *praxis* and how the diverse range of resulting challenges can be addressed by means of law by applying primarily a polycentric method.

This paper will argue that whilst credit rating agencies recognise the concept of ESG credit risk, it remains largely unaddressed in the legally binding regimes applicable to CMBSs and their ratings. Therefore, the paper shall conclude that the instruments controlling rating agencies, ratings and the structured products do not currently constitute a framework which accounts for ESG-related exposures in a systematic, harmonised and transparent manner.

Table of Contents

Primary sources iv
1. Introduction 1
1.1. Research question 6
1.2. Methodology and structure 8
2. Credit rating agencies 11
2.1. Short historical account and definition 11
2.2. Credit risk assessments 13
2.3. Credit rating agencies as gatekeepers 19
2.4. Credit rating agencies and ESG 21
2.5. Summary of Part 2 23
3. Securitisation and credit ratings 24
3.1. Securitisation 24
3.1.1. General considerations relating to securitisation and commercial mortgage-backed securities 24
3.2. Securitisation transaction 28
3.2.1. Loan portfolio 28
3.2.2. Structuring 34
3.2.3. Trading in secondary markets 39
3.3. Summary of Part 3 46
4. ESG credit risk 47
4.1. Architecture of the regime 47
4.2. Defining ESG 50
4.3. Theoretical framework 51
4.4. Environmental dimension 53
4.4.1. Regulating environmental and climate exposures 58
4.5. Social dimension 62
4.6. Governance dimension 67
4.6.1. A need for further regulation? 75
4.7. The potential of soft law, if any 79
4.8. Summary of Part 4 82
5. Conclusions 83
Bibliography vii

Primary sources

EU case law

Case C-98/01 Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland [2003] ECR I-4641

Case 6-64 Flaminio Costa v E.N.E.L [1964] ECR 585

Case C-318/07 Hein Persche v Finanzamt Lüdenscheid [2009] ECR I-359

Case C-302/97 Klaus Konle v Republik Österreich [1999] ECR I-3099

Case C-35/98 Staatssecretaris van Financiën v B.G.M. Verkooijen [2000] ECR I-4071

National case law

ABN AMRO Bank NV v Bathurst Regional Council [2014] FCAFC 64 (AU)

Escott v Bar Chris Construction Corporation [1968] 283 F Supp 643 (US)

LG Berlin, 05.05.2020 - 11 O 5/19 (GER)

EU law

Treaty law

Treaty establishing the European Economic Community (adopted 25 March 1957, entered into force 1 January 1958) 298 UNTS 3

Consolidated Version of the Treaty on European Union [2012] OJ C326/13

Single European Act [1987] OJ L 169/1

Legislation

Regulations

Council Regulation (EU) 2019/2089 of 27 November 2019 amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks OJ L 317/17

Council Regulation (EU) 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 [2020] OJ L 198/13

Parliament and Council Regulation (EU) No 513/2011 of 11 May 2011 amending Regulation (EC) No 1060/2009 on credit rating agencies [2011] OJ L 145/30

Parliament and Council Regulation (EU) No 462/2013 of 21 May 2013 amending Regulation (EC) No 1060/2009 on credit rating agencies [2013] OJ L 146/1

Parliament and Council Regulation (EU) 2021/557 of 31 March 2021 amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 crisis [2021] OJ L 116/1

Parliament and Council Regulation (EU) No 1095/2010 of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC [2010] OJ L 331/84

Parliament and Council Regulation (EU) No 2017/2402 of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012 [2017] OJ L 347/35

Parliament and Council Regulation (EU) 2013/34/EU of 22 October 2014 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC (consolidated version) [2014] OJ L 182/19

Parliament and Council Regulation (EC) No 1060/2009 of 16 September 2009 on credit rating agencies [2009] OJ L 302/1

Parliament and Council Regulation (EC) No 1060/2009 of 16 September 2009 on credit rating agencies (consolidated version) [2009] OJ L 302/1

Parliament and Council Regulation No 593/2008 of 17 June 2008 on the law applicable to contractual obligations (Rome I) (consolidated version) [2008] OJ L 177/6

Parliament and Council Regulation (EU) No 2017/1129 of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC [2021] OJ L 168/12

Parliament and Council Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (consolidated version) [2013] OJ L 176/1

Parliament and Council Regulation (EU) 2019/2088 of 27 November 2019 on sustainability-related disclosures in the financial services sector [2019] OJ L 317/1

Delegated and implementing regulations

Commission Delegated Regulation (EU) No 2020/1224 of 16 October 2019 supplementing Regulation (EU) 2017/2402 of the European Parliament and of the Council with regard to regulatory technical standards specifying the information and the details of a securitisation to be made available by the originator, sponsor and SSPE [2020] OJ L 289/1

Commission Implementing Regulation (EU) No 2020/1225 of 29 October 2019 laying down implementing technical standards with regard to the format and standardised templates for making available the information and details of a securitisation by the originator, sponsor and SSPE [2020] OJ L 289/217

Directives

Parliament and Council Directive No 2013/36/EU of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (consolidated version) [2021] OJ L 176/338

Parliament and Council Directive No 2014/95/EU of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups [2014] OJ L 330/1

National legislation

Act on the Energy Performance of a Building (*laki rakennuksen energiatehokkuudesta*) 50/2013 (FIN)

UN resolutions

UN General Assembly resolutions

UNGA RES/70/1 (25 September 2015) UN Doc A/RES/70/1

1. Introduction

Environmental, social and governance (ESG) matters are no longer merely a question of morality, ethics, philanthropy or values, but a question of existence. In August 2021, the Intergovernmental Panel on Climate Change (IPCC) Working Group I published its Sixth Assessment Report, stressing the unprecedented and either irreversible or nearly irremediable changes in climate in every region and across the climate system.[1] *Bradshaw et al* have come to equally ghastly conclusion and the scholars have stated that the globe is losing its ability to support complex life because as a result of inter alia optimism bias, people continue to emphasise economic growth whilst ignoring the concurring mass extinction, health issues, growing presence of climate-disruption upheavals and conflicts over resources.[2] Additionally, awareness and effects of the deteriorating state of environment and climate are drivers for and consequences of social changes. Further, given the central role and character of a business organisation as arguably the primary economic unit in modern societies and economies and the consequent impact of these entities on the surrounding world corporate, governance has proven to be the main vehicle capable of addressing the relationship between such an entity and society, environment and economy.

This illustrates the intertwined nature of the three dimensions of ESG which have not gone unnoticed in the realm of law either. In recent years one has witnessed the introduction of amongst others the United Nations (UN) Agenda for Sustainable Development and the Paris Climate Agreement which have contributed towards the ongoing transition to low-carbon, sustainable, resource-efficient and circular economy.[3] The doctrines and principles set forth in the aforementioned instruments and the instruments both preceding and succeeding them have also infiltrated into various national, regional and international legal regimes.

Examples of disciplines that are in turn greatly affected by the law and sustainability considerations are banking, finance and capital markets. Indeed, it is now widely accepted that the financial system will play a key role in the necessary adoption to a new reality, emphasising especially the role of sustainable finance.[4] Highlighting the role of

---

[1] Intergovernmental Panel on Climate Change (IPCC) Working Group I, 'Climate Change 2021: The Physical Science Basis' (Contribution to the Sixth Assessment Report, 7 August 2021) <www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf> accessed 12 August 2021.
[2] C Bradshaw et al, 'Underestimating the Challenges of Avoiding a Ghastly Future' (2021) 1 Front Conserv Sci.
[3] UN General Assembly RES/70/1 (25 September 2015) UN Doc A/RES/70/1.
[4] Commission, 'Action Plan: Financing Sustainable Growth'(Communication) COM (2018) 97 final (Action Plan), 1–2.

sustainability within the financial sector and system is of utmost importance because "…successful investment depends on a vibrant economy, which depends on a healthy civil society, which is ultimately dependant on a sustainable planet."[5]

This notion has been accepted in the European Union (EU). For example, EU has acknowledged the potential of capital markets to channel finance to the economy.[6] In a Green Paper published in 2015, European Commission (Commission) declared its intention to resurrect the European capital markets and support the role of capital markets with a view of providing funding to the real economy by diversifying the sources of finance.[7] This objective includes an additional goal targeting the identification and removal of barriers that would prevent investors from investing in a diverse range of products, as well as addressing barriers that may block businesses from reaching these investors, thus reflecting the foundational principle of freedom of capital which was formatively outlined in the Treaty of Rome and later on, in the process of developing the European Economic and Monetary Union.[8] In terms of ESG, the ambitions relating to the Capital Markets Union (CMU) are inevitable given that an annual investment volume of €330 billion by year 2030 is required to achieve the sustainability goals of EU.[9]

Capital market participants are diverse. However, an important group consists of business organisations seeking to finance tangible and intangible assets prerequisite for the entity to carry out business. To this effect, a corporation must make investment decisions which in turn result in the making of financing decisions. Such determinations are generally dependant on the type of business the entity engages in, as well as the size of it. However, what is common for all business entities is that the choice between debt and equity finance is a repeated one and retains its importance for as long as the organisation continues as a going concern. Often, however, the capital structure of a business entity tends to include

---

[5] 'Who Cares Wins: Connecting Financial Markets to a Changing World' (International Finance Corporation 2004) <https://documents1.worldbank.org/curated/en/280911488968799581/pdf/113237-WP-WhoCaresWins-2004.pdf> accessed 12 August 2021, 3; Action Plan (n 4) 3.
[6] Commission, 'Building a Capital Markets Union' COM (2015) 63 final, 4.
[7] ibid 2 and 5.
[8] ibid; Treaty establishing the European Economic Community (adopted 25 March 1957, entered into force 1 January 1958) 298 UNTS 3, art 3; on the definition of capital movement, see e.g. Case C-318/07 *Hein Persche v Finanzamt Lüdenscheid* [2009] ECR I-359; Case C-302/97 *Klaus Konle v Republik Österreich.*[1999] ECR I-3099, para 22; Case C-98/01 *Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland* [2003] ECR I-4641, paras 39 – 41; Case C-35/98 *Staatssecretaris van Financiën v B.G.M. Verkooijen* [2000] ECR I-4071, paras 27 – 30.
[9] Commission, 'Impact assessment accompanying the document communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions: Stepping up Europe's 2030 climate ambition' (Communication) COM (2020) 562 final.

both types of capital. This is because there exists only a limited number of organisation that are able to generate adequate cash flows from equity alone or hold retained profits to meet their financial obligations as they fall due; nor would it be necessarily rational to do so.[10] Similarly, funding the business dominantly with debt finance that could be raised by issuing securities or by borrowing it from willing institutions would result inter alia in exceedingly leveraged capital structure.[11]

Nevertheless, to contain the discussion merely within the confines of a clear-cut choice between equity and debt would fundamentally disregard the realities of finance. For instance, the category of debt is diverse and also intrinsically fragmented. This is for instance because debt has transformed into tradable commodity and contributed towards the breadth of and emerging innovation within capital markets.[12]

To this end, securitisation has been referred to as one of the greatest innovations in the field of corporate finance.[13] From the point of view of the borrower, securitisation transactions allow the conversion of otherwise illiquid assets into tradable financial instruments.[14] However, the motives of the originators of such securities may be faintly divergent to those of the traditional corporate borrowers. In the case of the first mentioned, the rationales may relate for example to the reducing of balance sheet or changes in risk appetite.

The novelty of securitisation lays partially on the underlying assets that may be subjected to structuring. These assets may include credit card receivables, leases, automobile loans and mortgages.[15] Nevertheless, the introduction of securitisation as a manner in which capital may be raised has not made the more conventional corporate lenders completely redundant. On the contrary, banks retain their position as the main providers of finance in EU.[16] Therefore, it is unsurprising that at least certain types of securitisations transactions are heavily bank-driven transactions. This results in an interesting paradox between banks being able to contribute to the closing of the gap for the transition to a sustainable economy whilst simultaneous being increasingly exposed to sustainability-linked risk risks through their

[10] L Gullifer and J Payne, *Corporate Finance Law: Principles and Policy* (3rd edn, Hart 2020) para 2.3.
[11] ibid.
[12] V Finch, 'Corporate Rescue in a World of Debt' (2008) 8 JBL 756, 758-760.
[13] D Eichwald, *Financing Real Estate - Concepts and Collateralisation* in M Mütze et al (eds), *Real Estate Investments in Germany* (2nd edn, Springer 2012), 85; J McConnell and S Buser, 'The Origins and Evolution of the Market for Mortgage-Backed Securities' (2011) 3 Annu Rev Finance Econ 173.
[14] ibid.
[15] D Solomon, 'The Rise of a Giant: Securitization and the Global Financial Crisis' (2012) 49 Am Bus LJ 859, 861.
[16] S Battiston et al, 'A climate stress-test of the financial system' (2017) 7(4) Nat Clim Change 283.

participation in capital markets and provision of finance to a diverse range of business organisations.[17]

Sustainability-related exposures are particularly eminent in commercial mortgage-backed securities (CMBSs) which is a market segment heavily dominated by banks. A CMBS is a fixed-income instrument in which "the payment stream to the holder is funded by the payment of principal and interest on an underlying pool of commercial mortgage loans".[18] In case of CMBS, the underlying pool of assets may contain loans secured against, for example, office buildings, apartment complexes, hotels, shopping centres, warehouses and industrial property.[19] In more general terms, CMBSs are characterised as debt securities, i.e. tradable financial instruments that a corporation issues. These securities are initially issued in primary markets, but may be subsequently traded in secondary markets; alternatively, they may be held by the original holders until maturity.[20] What makes this particular instrument attractive is its argued safety and a prospect for stable returns for as long as the real asset remains productive.[21]

Hence, whilst CMBSs have been characterised in a positive light, they too were subjected to criticism particularly in the aftermath of the 2008 global financial crisis (GFC). Additionally, in recent years concerns have been voiced about the impact of ESG risks on real estate and subsequently, on CMBSs. For example, in terms of the environmental dimension of sustainability, buildings were found to be responsible for circa 40 per cent of energy consumption and 36 per cent of CO2 emissions in the EU in 2019; in addition a significant volume of buildings included in investment portfolios have been discovered to suffer from energy inefficiencies.[22] Furthermore, attention is increasingly being paid to the decreasing amount of land viable for human use, illustrating one aspect of the social dimension of ESG bearing relevance in the field of commercial real estate. Social sustainability concerns attach particularly to certain segments of retail properties, such as shopping centres, hotels and office buildings, the supply of which has halted most recently in response to the covid-19

[17] ibid.
[18] Castro D, *Commercial Mortgage-Backed Securities (CMBS)* in Strumeyer G (ed), *The Capital Markets: Evolution of the Financial Ecosystem* (John Wiley & Sons 2017), 348.
[19] ibid.
[20] Gullifer and Payne (n10) para 2.3.3.1.
[21] G Hurd, 'Real Estate Bonds as an Investment Security' (1920) 88 Ann Am Acad Pol Soc Sci 79.
[22] Commission, 'Energy efficiency in buildings' (17 February 2021) <https://ec.europa.eu/info/sites/default/files/energy_climate_change_environment/events/documents/in_focus_energy_efficiency_in_buildings_en.pdf> accessed 19 August 2021.

pandemic, but the productivity and consequent value of which is also dependant on matters such as consumer preferences.[23]

However, other types of commercial real estate have remained resilient to major sustainability-linked shocks and preserved their ability to generate cash flows essential for the purposes of securitisation. Indeed, whilst in Q3 of 2020 commercial real estate investments were down by 39 per cent in comparison to the reference year, European Investment Bank (EIB) has estimated that investments in land, commercial buildings and infrastructure still account for 16 per cent of all investments made in 2020. [24] In addition, the European Systematic Board has acknowledged the important role which real estate plays in the economy and the material impact that developments in real estate sector have on the financial system.[25] Therefore, in light of the inherent exposure of commercial real estate to ESG risks, the relatively notable volume of investments directed to the sector and the ambition of the EU to diversify the sources of financing by supporting the use of capital markets, understanding the nexus between ESG, credit ratings and CMBSs is *sine qua non*.

The EU Action Plan for Financing Sustainable Growth has put forward an objective to mainstream sustainability into risk management systems with a view of accommodating the evolution towards low-carbon, sustainable, resource efficient and circular economy and to adequately address the exposures to sustainability-related risks.[26] This is where credit rating agencies (CRAs) step into play. As per *Wittenberg*, the purpose of CRAs is to address the information asymmetry and agency problem that dictates the relationship between investors who are looking to make optimal investment decisions and the issuers of inter alia structured products, such as CMBSs, who may be reluctant to disclose information regarding the credit quality associated with the structured product.[27] Therefore, the purpose of a CRA is to convey information on the quality of the credit associated with, for example, a financial

[23] 'European Property market Outlook: Q2 2021' (Aberdeen Standard Investments 2021) <www.aberdeenstandard.com/docs?editionId=db3843cc-e061-4d70-9ff6-c183a77a678b> accessed 13 August 2021, 6–7.
[24] 'Europe: Real Estate Investment in Q3 2020' (CBRE 2021) <http://cbre.vo.llnwd.net/grgservices/secure/CBRE%20EMEA%20Investment%20Snapshot%202020Q3_8v8z.pdf?e=1628848800&h=5f9cf853e8c2477d917f98d98ce6b8d4> accessed 13 August 2021; European Investment Bank (EIB), 'Building a smart and green Europe in the COVID-19 era' (EIB Report, 21 January 2021) <www.eib.org/en/publications/investment-report-2020> accessed 13 August 2021.
[25] European Systematic Risk Board (ESRB), Recommendation No 2016/14 of 31 October 2016 on closing real estate data gaps [2017] OJ C 31/1.
[26] Commission, Action Plan (n 4) 2 and 8.
[27] T Wittenberg, 'Regulatory Evolution of the EU Credit Rating Agency Framework' (2015) 16 Eur Bus Org Law Rev 669, 672.

instrument in the role of reputational intermediary which also holds quasi-regulatory powers.[28]

The focus of a CRA is on the financial materiality and relevance of exposures which could affect credit risk associated with the object of rating. Still, whilst risks deriving from ESG are already acknowledged to affect credit risk to a certain extent, aligning ESG considerations and the assessment of credit risk in the context of ESG is a complex exercise. To begin with, it has been questioned whether it is acceptable to engage economic theories for the purpose of calculating monetary value for sustainability. For instance, *Redford* and *Adams* have pointed that the lack of understanding of the complexity of biodiversity, accentuated by the focus on the functional attributes of ecosystem and consequent attempts to allocate a price tag on inter alia environment may result in people stopping "thinking hard about the wider consequences" of risks of environmental nature.[29] In addition, the school of green economists have argued that real economy with physical and biological limits is incompatible with the notion of market economy altogether.[30] Further, social sustainability consists of micro and macro level considerations and effects which are challenging to contain within the strict realm of defined areas of law, meaning that the dimension has somewhat fluid and encompassing nature. Hence, sufficient institutional recognition and support – as well as comprehensive understanding of ESG and particularly social sustainability in legal terms – is yet to develop. This is in stark contrast to the governance dimension of ESG which falls rather squarely within the regime of law of commercial organisations and therefore, holds a more cemented status.

1.1. Research question

Nonetheless, unless sustainability can be perceived to hold some tangible financial qualification, the level of its incorporation into the assessment of credit risk may fall short of what should be expected given the imminent importance of developing regimes that account for exposures relating to ESG. Therefore, this paper will assess how the impact of ESG on credit risk is currently perceived in the ratings of commercial mortgage-backed securities in light of the currently applicable regulatory framework consisting of different

[28] J Coffee, *Gatekeepers: The Professions and Corporate Governance* (OUP 2006); A Kruck, 'Asymmetry in Empowering and Disempowering Private Intermediaries: The Case of Credit Rating Agencies' (2017) 670(1) Ann Am Acad Pol Soc Sci 133.
[29] K Redford and W Adams, 'Payment for Ecosystem Services and the Challenge of Saving Nature' (2009) 23(4) Conserv Biol 785, 787.
[30] M Mellor, *The Future of Money: From Financial Crisis to Public Resources* (Pluto Press 2010), 155.

modalities.[31] This is done with a view of understanding whether the binding and non-binding regimes relating to credit rating agencies and CMBSs have separately and together succeeded in ensuring that the impact of relevant and material ESG-related considerations are accounted for in a systematic, harmonised and transparent manner when rating the said instruments within EU.

Therefore, the focus of this study is twofold: First, the paper shall analyse how CRAs perceive ESG considerations when CMBS transactions. In pursuance of this objective, the mandates, methodology and some internal governance of CRAs will be assessed in detail in order to gain an understanding of what the institutions are currently doing; what the relevant regimes implicitly and explicitly expects them to do; and to what extent CRAs as gatekeepers and quasi-regulators are falling short of the aim of internalising sustainability into credit quality assessments. Second, this paper will examine ESG credit risk in light of CMBS ratings. A CMBS will be approached from the premise that the instrument is a vehicle capable of directing investment flows to commercial real estate sector and therefore, the role of sustainability will be studied from the viewpoint of sustainable real estate. However, the analysis will also be extensively based on considerations relating to investor protection and financial stability.

The spill-over effects of this study are notable because neither ESG nor CMBSs and CRAs can be analysed in a vacuum. The concepts are inherently interlinked, but they also affect a diverse range of other market participants, policy objectives and trends. Therefore, this paper contributes to the existing line of literature at least in two ways.

Whilst in the aftermath of the 2008 GFC CRAs were subjected to extensive criticism for their failures as gatekeepers, resulting in some reforms being implemented in the EU regulation and the voluntary code of compliance, certain issues persist. In view of the relative immaturity and resulting unpredictability of ESG from a legal perspective, the impact of the remaining and emerging issues relating to CRAs demand addressing. In addition, as will be shown, controversies have equally attached to CMBSs. Yet, given the relative popularity of commercial real estate investment, ambitions relating to CMU and the extensive legal action already taken in pursuance of mainstreaming ESG in the financial sector and capital markets, critical assessment of the regulatory role and treatment of CMBSs in relation to ESG credit risk is essential.

[31] L Lessig, 'The New Chicago School' (1998) 27 J Legal Stud 661, 666.

1.2. Methodology and structure

Whilst the law affects societies and economies around it, societies and economies are equally capable of shaping the law. Therefore, legal method should be understood as a mechanism which provides insights into law.[32] Due to the inherently interdisciplinary nature of this paper, such an approach will indeed be embraced; the discussion set forth will equally touch on matters bearing relevance in terms of real economy and the technicalities and complexities of credit risk and securitisation – thus positioning itself at the very heart of *praxis* – and the ability to address the resulting diverse challenges by means of law.

The research question comprised of such dualistic composition will be examined within the *sui generis* framework of EU law.[33] One of the distinctive elements of the legal order is the trade-off between the traditional concept of uncompromised national sovereignty of States and the common objective to achieve the goals set forth in EU treaty law, often observed through the lenses of integration theories and constitutionalism.[34] In contravention to the strictly doctrinal perspective on EU law which dominated especially the early scholarship in the said field, today research relating to EU law and institutions is often based on the law in context approach which utilises diverse theoretical foundations and interdisciplinary and reflexive methods.[35] Such a perspective to legal theory and methodology in the field of EU law is partially due to the argued unclarity relating to the very nature of it, i.e. whether it can be classified as a body of international law, or whether it equals to a regional or supranational *corpus juris*.[36]

However, the debate is no longer contained within the confines of determining the nature of certain legal order in terms of its geographical scope. Rather, a shift away from "centrally institutionalised administrative steering tied to a holistic conception of the public interest" has emerged, meaning that bodies of law are being shaped by forces other than States; clearly, legislative powers delegated to EU by the Member States is one example of such a shift.[37] Overall, the initiation of the evolution is often connected to the globalisation of

[32] A Aarnio, *Oikeussäännösten tulkinta ja systematisointi* in J Häyhä (ed), *Minun metodini* (WSOY 1997), 31.
[33] Case 6-64 *Flaminio Costa v E.N.E.L* [1964] ECR 585.
[34] T Van Den Brink, The Impact of EU Legislation on National Legal Systems: Towards a new Approach to EU – Member State Relations (2017) 19 Camb Yearb Eur Leg Stud 211; the focus of this paper is not on the debate surrounding the priority of claims made by EU legislative institutions and particularly, the European Court of Justice, and national institutions of EU Member States.
[35] R Cryer et al, *Research Methodologies in EU and International Law* (Hart 2011), 32.
[36] N Walker, 'Legal Theory and the European Union: A 25th Anniversary Essay' (2005) 25 Oxf J Leg Stud 581, 587.
[37] ibid 585.

economy which has since resulted in the globalisation of other sectors as well.[38] This notion raises questions relating especially to the importance of public interest in areas which have traditionally been considered to belong within the confines of private law.

A consequence of such evolution is the emergence of public-private governance regimes, meaning that the authority to enact laws and regulations has shifted to the peripheries of law, sometimes even blurring the distinction between the law and certain internationalised sectors and entities entirely.[39] This has given rise to an added level of complexity in the relationship between conventional rule-making authorities, i.e. States and organisations such as EU, and some of the more novel concepts relating to private government, regulation and justice.[40] The aforementioned development has been particularly eminent in the field of financial regulation and more specifically, in the case of credit rating agencies, resulting in complex set of power relationships becoming overlapping.[41]

Hence, the realities of the financial sector can be systematised and observed by utilising a form of economic and socio-legal methodological perspective capable of approaching the study of law, legal institutions, actors and legal processes from an empirical point of view, ultimately attempting to fill the void between law on the books and law in action.[42] Analogies in this respect could be sought from the innovations of *Lessig* who proposes that the surrounding physical world is also capable of producing regulation.[43] In the context of this paper, this means that the practices of and expectations associated with the relevant parties to a CMBS transaction will be analysed through polycentric lenses.[44]

The meaning of polycentrism can be demonstrated via the study of sources of law and the interplay amongst the alternative structures responsible for governance within capital markets. As opposed to a sovereign State or an organised bundle of States forming a legal person being the sole regulator and imposing command-and-control type of rules on the

---

[38] G Teubner, *Global private regimes: Neo-spontaneous law and dual constitution of autonomous sectors?* in KH Ladeur (ed), *Public Governance in the Age of Globalization* (1st edn, Routledge 2004).
[39] ibid.
[40] ibid.
[41] See e.g. A Kruck, *Private Ratings, Public Regulations: Credit Rating Agencies and Global Financial Governance* (1st edn, Palgrave Macmillan 2011); B Sjåfjell and M Taylor, 'Planetary Boundaries and Company Law: Towards a Regulatory Ecology of Corporate Sustainability' (2015) University of Oslo Faculty of Law Legal Studies Research Paper Series No 2015-11, 4.
[42] R Cryer et al (n 35) 19; N Creutzfeldt, *Traditions of Studying the Social and the Legal* in N Creutzfeldt et al, *Routledge Handbook of Socio-Legal Theory and Methods* (1st edn, Routledge 2019), 10; R Pound, 'Law in Books and Law in Action' (1910) 44 Am L Rev 12.
[43] Lessig (n 31).
[44] Sjåfjell and Taylor (n 41) 3.

subjects whose undesired behaviours are sanctioned on *ex post* basis, the system also comprises of actors such as commercial organisations, investors, consumers and communities exerting regulatory powers.[45] For example, the Chicago school of thought has conventionally focused on the study of regulatory structures which fall outwith the direct effect of the law and rather aimed to understand the constitution of effective forms of control, i.e. structures which engender respect for rules or encourage compliance whilst accepting that the concept of law is merely one type of constraint which can be used to regulate behaviour.[46] As a result of the emergence of polycentric method, especially the role of social and market controls and discipline are gaining a renewed momentum also in the legal field.[47]

The selected methodological and theoretical approach requires the addressing of hierarchy between the sources of law and regulation, both those with binding legal effect and non-binding legal effect. Starting from a more conventional premise, treaties are classified as the primary sources of law in the European Union legal order.[48] Legislation consisting of regulations that are directly applicable instruments in Member States; directives which lack direct applicability and require to be implemented via national legislation in EU Member States; and decisions, recommendations, opinions and even soft law which have no legal force whatsoever, but which may prove useful in terms of its persuasive power and ability to influence policy, is considered to be a secondary source of EU law.[49] Simultaneously, international self-regulation, codes of conduct and other forms of soft law play important roles in the context of credit ratings and rating agencies. Whilst the use of these instruments is often based on voluntary compliance and contractual arrangements depending on the economic intention and willingness of the parties to the transaction, their direct and indirect impact on securitisation and credit ratings require to be addressed in spite of the subordinated position in relation to more authoritative EU law. This is particularly so in light of the quasi-regulatory role of CRAs in capital markets.

As credit rating agencies are at the heart of this paper, the discussion shall begin with an outline of the function and purpose of CRAs in capital markets and remarks relevant to the

---

[45] ibid 4.
[46] Lessig (n 31) 661–663.
[47] Most recently, the financial sectors of 1980s and 1990s were largely defined and dominated by neoliberal theories emphasising market forces and market valuations as a method of discipline or control. See e.g. M Martynova and L Renneboog, 'The Performance of the European Market for Corporate Control: Evidence from the Fifth Takeover Wave' (2011) 17(2) EFMA 208 and L Grabbe et al, 'Recent Developments in Corporate Finance' (1990) 76 Fed Res Bull 593.
[48] T Sorey and A Pimor, *Unlocking EU Law* (1st edn, Taylor & Francis 2018), 45–46.
[49] ibid 45–46 and 50.

process of rating CMBSs. In addition, Part 2 will consider the role of CRAs as gatekeepers, and given the quasi-regulatory role of the institutions, this line of argumentation will be connected to considerations relating to sustainability. From the viewpoint of assessing ESG credit risk in CMBSs, the primary objective of Part 3 is to analyse the three most material stages of securitisation transaction, as well as the relevant parties to it. Further, material concepts and trends linking CMBSs to ESG will be identified with a view of discussing the relationships in more detail in Part 4. Part 5 of this paper shall provide concluding remarks.

The purpose of Parts 2 and 3 of this paper is to illustrate the fundamental context and matrix of facts underlying the assessment of ESG credit risk in CMBSs. This is essential for the purpose of discussion presented in Part 4. In Part 4, the focus shall be more exclusively on the legal assessment of ESG credit risk. The discussion shall incorporate the two relevant aspects analysed in Parts 2 and 3 – one relating to CRAs as credit rating institutions and the other to CMBSs as structed products. Part 4 will then consider each dimension of ESG in turn and introduce relevant rules and norms deriving from market practice, regulation and finally, soft law.

2. Credit rating agencies

2.1. Short historical account and definition

The first publicised credit ratings were issued in 1909 when Moody’s began to rate railroad bonds.[50] Poor’s Publishing Company, Standard Statistics Company and Fitch Publishing Company followed the suit in 1916, 1922 and 1924 respectively.[51] In Europe, credit rating business centred similarly around assessing the creditworthiness of corporates and sovereigns, however, over the past decades, the product portfolio of rating agencies has expanded. Nowadays, alongside traditional ratings it includes the provision of ancillary services such as sustainability opinions. However, the importance of traditional credit ratings has become more cemented over the decades at least to a certain extent due to the increasing complexity and fragmentation within capital and financial markets.[52] Hence, CRAs have

[50] L White, ‘Markets: The Credit Rating Agencies’ (2010) 24(2) J Econ Perspect 211, 211.
[51] ibid.
[52] Alternatively, the emphasis placed on the arguably central role of CRAs could partially be explained with the negative publicity received by these institutions in response to abuses of their powers; Technical Committee of the IOSCO, ‘Report on the role of credit rating agencies in structured finance markets’ (Final Report, May 2008) <www.iosco.org/library/pubdocs/pdf/IOSCOPD270.pdf> accessed 18 August 2021, 3–4; I Chiu, ‘Regulating Credit Rating Agencies in the EU: In Search of a Coherent Regulatory Regime’ (2014) 25(2) Eur Bus Law Rev 269, 269.

bolstered their central role in spite of notorious gatekeeper failures, including that of Enron, and more recently, the shortfalls taking place in the countdown to the GFC.[53]

CRAs were initially controlled by means of self-regulation; of particular importance has been the IOSCO Code of Conduct that is based on the principle of voluntary compliance.[54] However, especially the GFC initiated a wave of critique from governments, judiciary and scholarship, indicating that reforms in relation to the constraints on and disciplining of CRAs would be necessary in order to avoid further gatekeeper failures.[55] Thus, the primary instruments currently included in the binding regulatory framework applying to CRAs directly in EU are Regulation 1060/2009 (CRA Regulation I); Regulation 513/2011 (CRA Regulation II) and Regulation 462/2013 (CRA Regulation III).[56] Additionally, in 2010, Regulation 1095/2010 granted the European Securities and Markets Authority (ESMA) powers relating to the registration and approval, standard-setting and supervision, and enforcement over CRAs.[57]

Credit rating agency is a legal undertaking that issues ratings which are also referred to as opinions of creditworthiness regarding corporates, debt obligations, financial obligations, debt securities, preferred shares and other financial instruments.[58] In EU, CRAs that meet the registration or certification requirements introduced in the CRA Regulation I may distil standardised and condensed data into an alphabetical symbol demonstrating credit risk associated with the rated product or entity. Hence, a credit rating can be understood to reflect

[53] J Coffee, 'Understanding Enron: It's about the Gatekeepers, Stupid' (2002) 57 Bus Law 1403; R D'Ecclesia and V Moriggia, *Credit Rating Agencies* in M Bertocchi et al, Euro Bonds: *Markets, Infrastructure and Trends* (World Scientific Publishing Company 2013), 108–110.
[54] Code of Conduct Fundamentals for Credit Rating Agencies (Final Report, IOSCO March 2015) <www.iosco.org/library/pubdocs/pdf/IOSCOPD482.pdf> accessed 1 July 2021 (IOSCO Code of Conduct).
[55] See e.g. M Fox, 'Gatekeeper Failures: Why Important, What to Do' (2008) 106(6) Mich L Rev 1089, 1091.
[56] Parliament and Council Regulation (EC) No 1060/2009 of 16 September 2009 on credit rating agencies [2009] OJ L 302/1 (CRA Regulation I); Regulation (EU) No 513/2011 of the European Parliament and of the Council of 11 May 2011 amending Regulation (EC) No 1060/2009 on credit rating agencies [2011] OJ L 145 (CRA Regulation II); Parliament and Council Regulation (EU) No 462/2013 of 21 May 2013 amending Regulation (EC) No 1060/2009 on credit rating agencies [2013] OJ L 146/1 (CRA Regulation III); Parliament and Council Regulation (EC) No 1060/2009 of 16 September 2009 on credit rating agencies (consolidated version) [2009] OJ L 302/1 (consolidated version of the CRA Regulation).
[57] Parliament and Council Regulation (EU) No 1095/2010 of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC [2010] OJ L 331/84 (Regulation Establishing ESMA); Additionally, CRAs fall within the scope of Regulation 596/2014 (MAR) and Regulations 2014/65/EU (consolidated version) (MiFID) and 600/2014 (consolidated version) (MiFIR), however, at this time these instruments will fall outwith the scope of this study.
[58] CRA Regulation I (n 56), art 3(1)(b).

the degree to which a given product meets the criteria of an ideal investment.[59] In contrast to internal ratings of financial products, the assessments produced by CRAs are external and therefore, they serve the purposes of both regulators and investors.[60]

The role of a CRA can be understood to be threefold. First, a credit rating provides an investor with easily assimilated and instantly accessible assessment of the credit quality of a complex financial instrument.[61] Second, a CRA is able to address information asymmetries by providing apparently unbiased data analysis about the rated product.[62] Third, credit rating may serve as benchmarks for capital requirement measurement.[63]

2.2. Credit risk assessments

As mentioned above, whilst the product portfolios of CRAs are diverse, the focus of this paper shall be on traditional credit ratings. Although the basic rationale behind ratings assigned to securities is similar regardless of the assigning credit rating agency, the focus of the methodologies varies ever so slightly. For instance, on one hand, Moody's ratings are primarily concerned with expected losses.[64] On the other hand, S&P and Fitch have traditionally concentrated on the likelihood of default.[65] The purpose of the succeeding paragraphs is to provide a general understanding of how credit rating agencies approach the task of designating a credit rating for a CMBS.

Issue ratings are forward-looking long- and short-term opinions that comprise of a set of credit risk elements analysed in the context of, inter alia, a specific financial obligation, class of financial obligations or a financial programme.[66] Because the assessment is concerned with evaluating credit risk, at the heart of the analysis is the issuance of an opinion on the ability and willingness of an obligor to meet its financial commitments as they fall due, as well as on the review of the terms and conditions, including those relating to the underlying

[59] ibid arts 3(1)(a) and (b); Chiu, 'Regulating Credit Rating Agencies in the EU' (n 52) 284; T Lagner and D zu Knyphausen-Aufseß, 'Rating Agencies as Gatekeepers to the Capital Market: Practical Implications of 40 Years of Research' (2012) 21(3) Financ Mark Inst Instrum 157, 171.
[60] J Cullen et al, 'Financing the Transition to Sustainability' (6 May 2020) LSN Research Paper Series No 20-09, 49.
[61] Commission, 'Communication from the Commission on Credit Rating Agencies' COM (2006) OJ C 59/02, para 2.2.
[62] ibid.
[63] N Legind and C Jensen, 'The European Regulation of Credit Rating Agencies' (2014) 30(30) Intl J Law Context 114, 114–115; D'Ecclesia and Moriggia (n 53) 139.
[64] M Efing and H Hau, 'Structured debt ratings: Evidence on conflict of interest' (2015) 116 J Financ Econ 46, 56.
[65] ibid.
[66] 'S&P Global Ratings Definitions' (S&P Global Ratings, 18 August 2016) <www.maalot.co.il/Publications/GMT20160823145849.pdf> accessed 13 August 2021, 3.

collateral and contractual subordination, which could affect the payment streams in different stress scenarios.[67] It should be noted that the methodology applied to map out credit risk by a CRA is not a static set of analytical tools, but may be subject to modifications over time given that such amendments do not impede the rigorousness of the methodology.[68] The methodology used to rate a specific transaction also depends on the type of the securitisation transaction; sometimes engaging in detailed loan-level analysis could increase especially transaction costs significantly, rendering the streamlining of the credit risk assessment more feasible an option.[69]

Assessment of the underlying commercial properties that secure the loans pooled into a CMBS loan portfolio is a central element of rating CMBSs. This is because an analysis of these assets enables CRAs to predict cash flows and capitalisation rates that are essential for the purposes of defining sustained values for properties in a longer time horizon.[70] Indeed, in addition to reflecting the competition and conflict inherent in the relationships between creditors and financially distressed corporate borrowers, collateral is often the dominant driver influencing CMBS performance and its strength could even mitigate the risks associated with the transaction. Therefore, the ability of the commercial property to yield stable income resiliently is essential in order to mitigate credit risk.[71]

Hence, one of the key objectives of a CRA is to conduct an analysis that aims to find sustainable value for collaterals over the lifecycle of the commercial properties. In practical terms, relevant considerations could relate to the design, designated function and quality of the construction.[72] These considerations will be assessed in more detail in the following paragraphs. However, regardless of the features relating to the properties of real assets, there are other variables that affect their value as collaterals in the underlying loans subjected to securitisation.[73] During an economic boom, lenders are comfortable with higher levels of leverage which in turn could result in higher property prices.[74] As the economic cycle takes a downturn, the phenomenon is reversed.[75] Additionally, megatrends affecting particularly market and consumer preferences have an impact on the level of volatility which will be

[67] ibid 4.
[68] CRA Regulation III (n56) recital 27.
[69] S&P Global Ratings (n 66) 3, 7 and 9.
[70] ibid 3.
[71] 'EMEA CMBS and CRE Loan Rating Criteria' (Criteria Report, Fitch Ratings 12 June 2020), 33; R Mokal, *Corporate Insolvency Law: Theory and Application* (1st edn OUP 2005), 3.
[72] ibid 7.
[73] ibid.
[74] ibid.
[75] ibid 7; 'CMBS Large Loan Rating Criteria' (Criteria Report, Fitch Ratings 10 April 2020), 6.

reflected on the value of the collateral. This means that a level of resilience to external impacts, such as those deriving from ESG, could be prerequisite.

As per Fitch, the key rating drivers in CMBSs are property cash flows, collateral characteristics and loan and transaction structure.[76] Consideration of cash flows can be broken further down into factors such as rents; leasing and replacement costs; level of vacancy; and operating expenses.[77] Generally, the gist of cash flows can be summarised as reflecting present value of future cash flows and at the heart of the analysis is the level, timing and consistency of income.[78]

The collateral is assessed against similar criteria, i.e. according to the attributes that influence the productivity of the asset, meaning the level and consistency of income with subsequent impact on the ability to recover the loan or refinance it.[79] This means that especially the quality of the collateral, tenancy and occupancy levels and its geographical location together with considerations relating to market features are key elements incorporated into credit risk assessment in a CMBS transaction. In terms of quality, key determinants are, therefore, the attributes that can be obtained from quality assessments and valuation reports and even by conducting site visits *ex ante* and *ex post* the rating. With regards any lease agreements relating to the commercial property, the considerations may vary from tenant diversity to creditworthiness of the lessees themselves, and from terms of the leases to occupancy levels relative to certain markets.[80] Relevant attributes considered as part of the location and market analysis relating to the commercial property include matters such as analysis of submarkets and primary markets and the geographical location of the real asset, including the proximity of the property to infrastructure such as public transport.[81]

In addition to the analysis attaching to collateral, rating agencies also assess features of the underlying financing arrangements. The analysis appears to culminate to the terms and conditions of the original loan. The relevant considerations incorporated into the loan through legal design include inter alia scheduled amortisation – referring to scheduled payments of principal and interests to write off the loan or the commercial property – release price, i.e. the amount of loan balance outstanding on the date on which the commercial

[76] ibid 1.
[77] ibid 5.
[78] ibid 6.
[79] ibid.
[80] ibid 7.
[81] ibid 7.

property as a security is released; and hedging, which as a concept refers to risk exposures that could result from adverse movements of, for instance, interest rates.[82] Furthermore, of interests are any potential exposures that may attach to the underlying loan structures, including any other existing security arrangements.[83] From a legal point of view, such risks may include issues relating to the title to the property, conflicts relating to pre-existing negative pledge and environmental issues and claims.[84]

Although the above considerations relating to the rating of an issue attach dominantly to the commercial property as a collateral and the commercial mortgages grouped together for the purpose of securitisation, another set of determinants have been developed for the purpose of analysing the very securitisation transaction and tranching. These elements are, however, connected to the above discussion because the conclusions reached by a CRA in connection with the analysis of the collateral and original loans will be used to establish loan-to-value thresholds – the ratio of the loan to the amount recoverable from the asset if realised – for the original loans with a view of establishing tranches accordingly.

On one hand, the transactional side of the credit rating assessment is founded upon the likelihood of recovery in the event that the underlying assets, i.e. original borrowers, default.[85] Tranching reflects the proceeds that will be recoverable at a corresponding rating-specific stress level, and the rating of a tranche indicates the amount of proceeds which should be available to creditors.[86] The criteria used to determine recovery rates should indicate implied loss of value attaching to the property in each tested stress scenario to which a series of adjustments may also be applied. The adjustments could take into considerations determined asset characteristics and loan-level and transaction features.[87] On the other hand, an equally important transaction level relates to legal risks associated with the securitisation. As shall be discussed in the succeeding parts of this paper, insulating exposures that relate to financial distress affecting underlying assets, or the securitisation special purpose entity (SSPE) participating in the transaction, is of paramount interest. Therefore, for instance Fitch

[82] Fitch Ratings, 'EMEA CMBS and CRE Loan Rating Criteria' (n 71) 1.
[83] ibid.
[84] P Wood, *Law and Practice of International Finance* (1st edn, Sweet & Maxwell 1980), 327–332; Fitch Ratings, 'CMBS Large Loan Rating Criteria' (n 75) 1.
[85] S&P (n 66) 9.
[86] ibid.
[87] ibid.

Ratings discloses that any added legal risks deriving from the use of SSPEs will indeed be reflected in the credit ratings.[88]

Methodologies used by CRAs are applied against data sets. It is expressly stated in the relevant regulation that the methodologies used for this purpose should not be impeded because this would compromise the assumed objectivity of credit ratings.[89] However, the process is subject to other provisions which aim to implement necessary safeguards to prevent misconduct that could derive from any misuses of, for instance, the analytical tools.

First, according to the CRA Regulation III, issuers are required to engage at least two CRAs in the rating of a structured product and one of the rating agencies should not hold a market share exceeding 10 per cent.[90] The requirement aimed at ensuring the objectivity of ratings and the prevention of misjudgements has, however, been subjected to criticism. This is because getting a smaller rating agency to provide the second opinion in a market that is highly concentrated and burdened by high barriers to entry could render the safeguards meaningless given that the ability of such a marginal market participant to rate complex products, including CMBSs accurately may be questionable.[91] Additionally, the provision lacks teeth – in cases where the issuer or related third party does not intent to appoint a rating agency with a market share less than 10 per cent, the entity is merely required to document the decision.[92] This also illustrates the cross-jurisdictional nature of credit rating agencies and similarly global endorsement of credit ratings which has resulted in competitive advantage being enjoyed by established rating agencies, i.e. market participants such as S&P, Moody's and Fitch. Indeed, in 2020 the market share of S&P Global Ratings equalled to 40.40 percent, Moody's Investor Services to 33.12 per cent and Fitch Ratings to 17.55 per cent.[93] As the three major institutions dominate credit rating markets, they are able to continuously accumulate reputational capital without which gatekeepers cannot operate, thus further reinforcing the barriers to entry. The result is a rat race.

A further particularity relating to the rating of structured finance, including CMBSs, is that different CRAs have to use non-identical rating categories and symbols.[94] Whilst rating

---

[88] Fitch Ratings, 'CMBS Large Loan Rating Criteria' (n 75) 2–3.
[89] Consolidated version of the CRA Regulation (n 56) art 23.
[90] CRA Regulation I (n 56) arts 8c and 8d.
[91] Chiu, 'Regulating Credit Rating Agencies in the EU' (n 52) 288–289.
[92] CRA Regulation I (n 56) art 8d(1).
[93]ESMA, 'Report on CRA Market Share Calculation' (14 December 2020) <www.esma.europa.eu/sites/default/files/library/esma_33-9 383_cra_market_share_calculation_2020_0.pdf> accessed 18 August 2021, 6.
[94] CRA Regulation I (n 56) art 10(3).

agencies have adopted different terminologies to describe the ratings, common symbols generally vary from AAA as the highest category to D as the lowest category, reflecting the likelihood of default and rate of recovery.[95] Ratings below BBB- or equivalent are deemed non-investment grade. Legal effects relating to the level of credit rating obtained to a transaction plays a significant role both under national laws and under EU law because the likelihood with which for instance an institutional investor will be able to buy or hold debt instruments rests on the credit quality of the debt obligation; this means that as the quality of the product declines and as long as this decline is reflected accurately in the rating, so decline the chances of an entity to obtain refinancing or funding from capital markets because the rating may be deemed overly risky from a viewpoint of an institutional investor.[96] This is inherently connected to the distillation of information into a certifier product, allowing investors to decide whether they can or wish to assume the risks associated with any given security. Hence, in addition to the discipline connected with the discretion exercised by an investor on the basis of corresponding risk appetite, CRAs also facilitate legally binding market-based discipline mechanism deriving from binding regulation.[97]

An alternative approach to credit ratings as discipline and control meachanism is provided by *Chiu* who states that ratings are effectively credence goods.[98] This means that investors will not be able to obtain certainty as to the actual quality of the product from an outset.[99] In other words, investors will not be able to determine the factual reliability of ratings and the extent to which they should have been relied on but for in hindsight.[100] However, in addition to credit rating agencies themselves exercising market discipline in this manner through their quasi-regulatory role, it is arguable that the credence goods should themselves be subjected to certain legal constraints because the uncertainty attaching to their accuracy. Yet, according to the line of argumentation set forth by *Chiu*, enacting binding obligations applicable to rating agencies as providers of ratings and ratings as products should theoretically be unnecessary because the products offered to investors are nothing more than information signals; consequently, the feedback received from the parties utilising and testing the product should control them to the extent necessary.[101] The assumption has

[95] ibid.
[96] Coffee, *Gatekeepers* (n 28) 2.
[97] M Hemraj, *Credit Rating Agencies: Self-regulation, Statutory Regulation and Case Law Regulation in the United States and European Union* (1st edn, Springer 2015), 4; Coffee, *Gatekeepers* (n 28) 283.
[98] ibid 178; Chiu, 'Regulating Credit Rating Agencies in the EU' (n 52) 271.
[99] ibid 271.
[100] ibid.
[101] ibid.

proved erroneous especially in the context of structured products, the issue, sale and marketing of which have not conventionally been subject to any single body of regulation, consequently increasing the materialised risk of granting a "healthy" credit rating to an undeserving instrument.[102] This means that a credit rating granted in the form of an alphabetical symbol has failed to reflect the credit risks accurately whilst investors have been excessively reliant on them being able to do so.

2.3. Credit rating agencies as gatekeepers

In light of above, regulators at EU level have attempted to shift more responsibility on investors to conduct due diligence prior to acting on an investment decision. This does not, however, change the function and purpose of a CRA as a gatekeeper. Even if the term gatekeeper may be understood to hold more of a metaphorical than precise meaning, it connotates that an external independent party in the role of a watchdog identifies flaws and defects or verifies compliance with standards and procedures.[103] In financial and capital markets this can translate into the provision of certification or verification services on repeated basis. Thus, by assigning structured product a credit rating, a rating agency in the role of financial intermediary pledges its aggregated reputational capital and pierces "the fog of asymmetric information" by providing objective opinions relating to the quality of the credit.[104] In other words, a CRA is able to vouch for another entity or financial instrument as it arguably holds a weaker incentive to deceive other market participants.[105]

Therefore, a credit rating may be understood as the essential service that a wrongdoer requires to succeed, i.e. the gate that a CRA oversees.[106] As *Friedman* has put it, "[T]he United States can destroy you by dropping bombs, and Moody's can destroy you by downgrading your bonds."[107] This means that due to the importance of credit ratings in the financial system and the aggregated reputational capital held by a CRA, such an institution has the potential to increase the confidence of other market participants, including investors, towards statements made in connection with a securitisation transaction by rendering these statements plausible.[108] However, if the rated product falls short of the requirements set for a certain band of rating, a CRA may exercise discipline by lowering the rating with the

[102] ibid.
[103] Coffee, *Gatekeepers* (n 28) 2.
[104] White (n 50) 213.
[105] ibid.
[106] R Kraakman, 'Gatekeepers: The Anatomy of Third-Party Enforcement Strategy' (1986) 2 J L Econ & Org 53, 54.
[107] As cited in Coffee, *Gatekeepers* (n 28) 283–284.
[108] ibid.

consequence of making the investment in the structured product potentially less desirable due to the risk it carries.

Credit ratings enable market participants to react quickly to any changes in circumstances affecting ratings. Downgrade movement may trigger provisions set forth for instance in national legislation, but it may also build up barriers between the commercial organisation and capital markets, preventing borrowers accessing capital, increasing the costs of it to a level that is infeasible or by blocking the opportunity to reallocate risks. It is also for these reasons that methodologies, credit ratings and the conduct of rating agencies should be conceived legitimate and trustworthy. Similarly, because inflated ratings and failures to assess credit risk accurately may result in severe market disruptions, ensuring that investors do not act in an over-reliant manner and omit the conducting of due diligence is paramount.[109] Given the state of flux relating to sustainability as a legal concept, the final notion carries substantial importance.

The above considerations give rise to a two-fold argument. First, in order to retain confidence in capital markets, it is fundamental to ensure that effective control mechanisms are in place and oblige credit rating agencies to adhere to a certain standard. It has been shown that the applicable regimes in EU are currently failing in this respect.[110] In view of the campaigns to incorporate ESG into other segments of financial markets in a legally binding form, including those which utilise credit ratings on regulatory basis, it is doubtful whether the regime as a whole will be able to protect the stability of financial and capital markets and ensure the accommodation of prudent decision-making unless ESG is taken into account harmoniously, systematically and transparently.[111] In this regard it is arguable that the current safeguards deriving from the CRA Regulations, including the requirement to obtain at least two credit ratings and the obligation to use divergent symbolics indicating the level of credit risk, are fully misapprehending the relationship between credit ratings and ESG and hence, in this respect inefficient.

---

[109] Furthermore, disruptions may also derive from investor disagreement. See e.g. T Broer, 'Securitisation bubbles: Structured finance with disagreement about default risk' (2018) 127(3) J Financ Econ 505.

[110] Chiu, 'Regulating Credit Rating Agencies in the EU' (n 52); Hemraj (n 97) ch 7; ESMA, 'Credit Rating Agencies: ESMA's investigation into structured finance ratings' (16 December 2014) <www.esma.europa.eu/sites/default/files/library/2015/11/esma-2014-1524_cra_public_report_on_sf_u_investigation.pdf > accessed 20 July 2021, 4. For a US perspective, see D Cash, 'Credit rating agencies and environmental, social and governance considerations: a long road ahead' (2017) 3 IBLJ 281.

[111] Chiu, 'Regulating Credit Rating Agencies in the EU' (n 52) 270; Cash (n 110) 282.

Second, as capital markets become more complex in terms of their architecture and the instruments exchanged within them, reducing the reliance of investors on credit ratings has risen to the political and subsequently, legal agendas especially in EU.[112] The proposition results in partially paradoxical suggestion: Whilst regulators are concerned with the accuracy of ratings and attempt to employ measures to address this problem, investors are exceedingly encouraged to not to rely on credit ratings and instead, conduct their own assessment of the exposures relating to the rated structured product. This is even though investors are unable to access at least some of the information that is available to CRAs, meaning that the credit risk assessment conducted by an investor will never be as informed as the assessment conducted by a CRA.[113]

2.4. Credit rating agencies and ESG

Although ESG considerations have been recognised to affect capital markets, CRAs have escaped legally binding obligations mandating the institutions to have regard to sustainability for instance by way of requiring them to incorporate ESG into the methodologies and models used by them. Such express incorporation could, however, take place under the provisions of the Commission Action Plan for instance by way of amending the relevant regulations that will be discussed in detail in Part 4 of this paper. Alternatively, ESMA could incorporate sustainability considerations into its guidelines with potentially less obliging legal effect.[114]

The main objective of ESMA as a watchdog is to protect the stability of the European financial system by implementing necessary safeguards and ensuring that the markets function efficiently, transparently and with integrity.[115] In view of this, ESMA must contribute to the harmonious application of EU legislation within European Union and together with the European Banking Authority (EBA) and European Insurance and Occupational Pensions Authority (EIOPA) (all three together the ESAs), the supervisory

---

[112] ibid.

[113] T Lynch, 'Deeply and Persistently Conflicted Credit Rating Agencies in the Current Regulatory Environment' (2009) 59 Case W Res L Rev 227, 242–243.

[114] ESMA, 'ESMA Technical Advice to the European Commission on Sustainability Considerations in the credit rating market' (18 July 2019) <www.esma.europa.eu/sites/default/files/library/esma33-9-321_technical_advice_on_sustainability_considerations_in_the_credit_rating_market.pdf> accessed 12 July 2021, 3.

[115] G Deipenbrock, 'Direct Supervisory Powers of the European Securities and Markets Authority (ESMA) in the Realm of Credit Rating Agencies – Some Critical Observations in a Broader Context' (2018) 29(2) Eur Bus Law Rev 169, 174; Regulation Establishing ESMA (n 57) art 1(5).

body ought to play part in accomplishing strategic goals of EU.[116] Given the recognised centrality of capital markets in promoting sustainability, as well as the continuously developing legal framework around sustainable finance in EU, ESMA could consequently be understood to have an obligation to endorse sustainability within capital markets.[117] Indeed, an aspect of advocating a robust sustainability regime includes the development of effective risk management systems and supervision regimes which in the context of capital markets should include credit ratings.[118] Yet ESMA has expressly articulated its reluctance to amend the current regime to explicitly mandate CRAs to account for ESG in credit ratings.[119]

The three quasi-regulatory roles of credit rating agencies have been articulated by *Kruck.*[120] First, States as conventional legislators are themselves subjected to credit quality analysis as CRAs assign sovereign ratings.[121] Further, CRAs are legally constrained and disciplined through law and regulations developed by States and certain other supranational institution. Finally, States utilise creditworthiness assessments when designing financial regulation.[122] In the context of this paper a prime example of the third use is the EU prudential regime. Therefore, public interest in inherent in credit ratings.

In light of the regulatory use and quasi-regulatory role of credit ratings, the broader EU policy and legal agenda promoting sustainability across financial sector is in conflict with the concurrent unwillingness to harmonise the risk management regime within which CRAs and ratings arguably fall. In other words, whilst other relevant areas of financial sector have been subjected to obligations that relate to mandatory incorporation of ESG and consideration of ESG-relate exposures, rating agencies which have been attributed some of the responsibility to ensure compliance with these same regimes remain unaddressed. For example, EBA has initiated a consultation on the implementing technical standards for Pillar 3 disclosures on ESG risks under Article 449a of the CRR.[123] As CRAs in the role of quasi-regulators form an integral part of capital adequacy and liquidity regime without any

[116] ibid art 8(1): M Munoz-Torres and J Rivera-Lirio, *Sustainability Impact Assessment in ESAs* in M Andenas and G Deipenbrock (eds), *Regulating and Supervising European Financial Markets: More Risks than Achievements* (Springer 2016), 194–195.
[117] ibid.
[118] ibid 196.
[119] ESMA, 'Technical Advice' (n 114) 4.
[120] Kruck, *Private Ratings, Public Regulation* (n 41) 45–46.
[121] ibid.
[122] ibid 46.
[123] Parliament and Council Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 [2013] OJ L 176/1 (CRR).

harmonised mandate relating to ESG attaching to them, it is arguable that the misalignment could result in discrepancies, arbitrage and more generally, legal uncertainty deriving from conflicting duties and interests.

Whilst efforts have been made to define ESG risks at EU level, the current regime still falls short also in terms of common definitions. This arguably results in varying approaches being adopted across different segments.[124] Nevertheless, from a point of view of CRAs this issue can be approached by first defining credit risk which refers to the risk of default arising from the borrower failing to make payments on a debt obligation. Hence, narrowly speaking the concept of ESG credit risk can be understood to refer to the risk of default arising from ESG-related exposures. Consequently, with regards credit rating agencies it may be stated that the issue is not *per se* the lack of definition of ESG credit risk, but the fragmented approach to ESG overall. This demonstrates the insufficient support for the purpose of integrating ESG into the relevant risk management frameworks at an institutional level whilst simultaneously the regulatory use of credit ratings is profoundly institutionalised.[125]

However, the proposition must still be balanced with considering to what extent credit rating market as a market for gatekeeping allows the designing of legal duties that can utilise the role of CRAs as watchdogs at acceptable cost.[126] In other words, the question partially depends on the balance that one seeks to strike between public and private interests; ultimately, CRAs as private entities operate within State-sanctioned governance regime aiming to enhance the safeguards for investors by providing goods and services in the form of credit ratings which in turn are inherently linked to public interest consideration, because the institutions have a “pervasive and potentially devastating” impact on the financial prosperity and well-being of the public.[127]

2.5. Summary of Part 2

Whilst CRAs may adopt differing approaches to the process of rating structured products such as a CMBS, the foundational rationale behind credit ratings is to help investors to determine the risk involved in a defined investment by providing an objective assessment of

[124] EBA, ‘EBA Report on management and supervision of ESG risks for credit institutions and investment firms’ (2021) <www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Reports/2021/1015656/EBA%20Report%20on%20ESG%20risks%20management%20and%20supervision.pdf> accessed 17 August 2021, para 29.
[125] Fox (n 55) 1110; Kruck, *Private Ratings, Public Regulation* (n 41) 171.
[126] Kraakman (n 106) 101.
[127] Lynch (n 113) 227.

the credit quality of the structured instrument. This is done by applying methodology and other analytical tools against a data set with a view of identifying relevant and material factors that could have an impact on credit quality. With regards CMBSs, to CRAs the aspects of interest in relation to ESG credit risk are primarily the original loans, commercial property as a collateral and the securitisation transaction itself.

Conventionally, credit ratings and credit rating agencies have escaped the reach of legally binding control mechanisms irrespective of their gatekeeper duties. In EU, some regulatory reforms were introduced in the aftermath of the GFC, targeting particularly matters such as integrity, quality and transparency of securities ratings. However, in the face of new challenges and predominantly the proliferation of sustainability, consequently highlighting the nexuses between various regimes and market participants, the effectiveness of the regime is put to a test.

The role of CRAs as gatekeepers will be similarly confronted. Whilst sustainability is developing into an integral and unavoidable concept that is driven especially by strong market demand, CRAs have not been expressly mandated to account for it in ratings of structured products such as CMBSs which are particularly prone to sustainability-related exposures. Given the central role of CRAs in capital markets and their quasi-regulatory role, the results may be paradoxical and in the long term compromise the stability of the financial system and robustness of investor protection regimes.

3. Securitisation and credit ratings

3.1. Securitisation

3.1.1. General considerations relating to securitisation and commercial mortgage-backed securities

In the context of this paper, the most important legislative instrument applying explicitly to securitisations in EU is Regulation (EU) 2017/2402 (Securitisation Regulation).[128] The instrument lays out a general framework applicable to all securitisations which have occurred after 1 January 2019 with some exceptions, but it also establishes a framework for simple, transparent and standardised (STS) securitisation.[129] Furthermore, in September 2020, two technical standards relating to disclosures were introduced: Delegated Regulation

[128] Parliament and Council Regulation (EU) No 2017/2402 of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012 (consolidated version) [2017] OJ L 347/35 (Securitisation Regulation).
[129] ibid art 48.

(EU) 2020/1224 and Implementing Regulation (EU) 2020/1225.[130] The objective of these two instruments is inter alia to better accommodate due diligence and risk assessments relating to underlying exposures of securitised products, as well as the efficient collection and assessment of data by relevant transaction parties.[131]

Securitisation is a transaction in which a financial institution, often a bank in the role of originator – i.e. the entity that initially holds the claims against borrowers under a debt obligation – transforms often illiquid assets into tradable securities.[132] In the case of CMBS, these assets are commercial real estate mortgages and the commercial properties securing them. The loan portfolio or credit risk associated with it is transferred to a bankruptcy-remote entity and the loans are repackaged by way of tranching. Tranches may subsequently be offered to investors or alternatively, the original holder may retain the instruments until maturity.

CMBS transaction is a type of application of securitisation process. In terms of the nature of a CMBS, it is an instrument classed as a fixed income product, meaning that the maturity of the instrument is relatively long and payments to investors are commonly made at a fixed rate. Therefore, the instrument and the potential yields available to investors are dependant on stable and timely cash flows. In terms of process, securitisation involves several parties, including obligors, originator, SSPE and investors. In addition, servicers, asset managers, legal and financial advisors, auditors and credit rating agencies will be involved in the transaction as external parties. This paper limits the study to obligors, originators, SSPEs, investors and credit rating agencies.

The roots of securitisation are in the financial markets of the United States (the US) where the Government National Mortgage Association began offering securitised instruments backed by mortgages to investors.[133] In Europe, asset-backed securities emerged towards the

[130] Commission Delegated Regulation (EU) No 2020/1224 of 16 October 2019 supplementing Regulation (EU) 2017/2402 of the European Parliament and of the Council with regard to regulatory technical standards specifying the information and the details of a securitisation to be made available by the originator, sponsor and SSPE [2020] OJ L 289/1 (Disclosure RTS); Commission Implementing Regulation (EU) No 2020/1225 of 29 October 2019 laying down implementing technical standards with regard to the format and standardised templates for making available the information and details of a securitisation by the originator, sponsor and SSPE [2020] OJ L 289/217 (Disclosure ITS).

[131] ibid recitals 2.

[132] M Haentjens and P De Gioia-Carabellese, *European banking and financial law* (2nd edn, Routledge 2020), para 14.2.4.2.

[133] B Casu and A Sarkisyan, *Securitisation* in A Berger *et al*, *The Oxford Handbook of Banking* (3rd edn, OUP 2019) para 16.2; MJ Brennan et al, 'Tranching and Rating' (2009) 15(5) Eur Financial Manag 891, 895.

end of 1980s in the United Kingdom (the UK).[134] Nevertheless, a volume of transactions worth noting were reached only at the beginning of 1990s.[135] As banks had long been the primary providers of commercial real estate financing, markets for commercial real estate financing were, and continue to be, naturally dominated by these institutions. This is somewhat unsurprising given that especially banks do not only hold resources required to screen and monitor borrowers, but they are also generally able to manage risk efficiently. Hence, it is arguable that the emergence of securitisation has diversified the available sources of capital whilst not *per se* transforming the pool of participants to debt finance markets.[136]

In this regard, securitisation can be understood as a method of reallocation of risk to market participants willing and able to bear it. Moreover, securitisation transactions may enable banks to increase the productivity associated with leveraged lending. However, following the theory set forth by *Modigliani* and *Miller*, it is arguable that securitisation should not be necessary at all due to the optimal liquidity and non-existing information asymmetries in perfect financial markets.[137] Hence, it is possible to understand securitisation to be a mechanism which enables the correcting of imperfections and inefficiencies within capital markets. Still, in the aftermath of the 2008 GFC there occurred a significant decline in securitisation activity. The halt resulted in somewhat paradoxical position where a process designed to increase liquidity compromised the functioning of the financial system.[138]

CMBS transactions too came under fire for the systematic failures that occurred. However, in spite of the controversy, securitisation preserves its economic importance. Due to the centrality of bank-provided finance in real estate markets, securitisation is also at the heart of banking sector, because banks are ideally positioned in the markets due to the large stocks of commercial mortgages held by these institutions. It has been shown that in the past, banks tended to retain a relatively high proportion of the securities created through securitisation on their balance sheets until maturity (originate to hold).[139] However, later on it had become a common practice for originators to engage in securitisation transactions with a view of

[134] N Senanayake, *Asset-backed Securitization and the Financial Crisis: The Product and Market Functions of Asset-backed Securitization: Retrospect and Prospect* (Diplomica Verlag 2010), 12.
[135] ibid.
[136] A Baum and D Hartzell, *Real Estate Debt Markets* (Wiley-Blackwell 2011), 340.
[137] F Modigliani and M Miller, 'The Cost of Capital, Corporation Finance and the Theory of Investment' (1958) (1958) 48(3) Am Econ Rev 261.
[138] J Solomon and W McCluskey, 'Commercial mortgage backed securities: resurgence or demise' (2010) 28(6) JPIF 398, 398; ESBR (n 5) recital 1.
[139] S Bougheas, 'Pooling, tranching, and credit expansion' (April 2014) 66(2) Oxford Economic Papers 557, 558.

distributing the instruments to secondary markets (originate to distribute).[140] Irrespective of the rationale, from the perspective of an originator the benefits deriving from securitisation could relate to the potential of receiving access to novel sources of funding opportunities; risk management; and adjustment of capital ratios.

In accordance with wider policy objectives, incorporating sustainability into securitisation transactions presents an opportunity to contribute towards the closing of the gap for the transition to a more sustainable existence whilst also freeing balance sheets and redistributing risks. However, as per *Stellner et al* and *Devalle et al*, the primary focus of ESG and its relationship with finance has conventionally been on equity capital and only a limited amount of scholarship has studied the link between ESG and debt.[141] Nevertheless, from the perspective of credit quality of debt obligations, the relevance and materiality of ESG-related risks is significant because the level of exposure of structured products to risks deriving from ESG is considered average or above average.[142] In addition, from an investor point of view a failure to diligently assess exposures relating to the credit risk associated with the structured product would effectively compromise the possibility to invest in instruments carrying risk corresponding with the risk appetite of the investor.[143] This could be particularly true if the investor seeks to make an investment decision involving moderate level of risk. Reflective of the exposures deriving from sustainability is that between January and March 2021, out of 72 ratings bearing relevance in terms of ESG in the field of structured finance, 62 cases related to downgradings of ratings.[144]

The growing importance of ESG is apparent also in the increasing amount of securitisation transactions which link commercial mortgage-backed securities to ESG. For example, the IOSCO Green Bond Principles compliant River Green Finance 2020 DAC issue was the first green CMBS transaction in Europe.[145] The €186.4 million deal was followed by a £220 million Sage AR Funding No 1 Plc issue of social housing rental notes secured on a senior loan and financing the acquisition or refinancing of affordable housing properties in the

[140] ibid.
[141] K Stellner and B Zwergel, 'Corporate social responsibility and Eurozone corporate bonds: The moderating role of country sustainability' (2015) 59 J Bank Financ 538; A Devalle et al, 'The linkage between ESG Performance and Credit Ratings: A Firm-level Perspective Analysis' (2017) 12(9) Int J Bus Manag 53, 55.
[142] M Mitchell et al, 'The ESG Pulse: A Spotlight on Structured Finance (S&P, 28 April 2021) <www.spglobal.com/ratings/en/research/articles/210428-the-esg-pulse-a-spotlight-on-structured-finance-11928102> accessed 25 June 2021.
[143] Haentjens and De Gioia-Carabellese (n 132) para 14.2.3.
[144] ibid.
[145] T Conduit and I Tinsley, 'Implications of sustainability and ESG for the securitisation market' (Allen & Overy, April 2021 <https://www.allenovery.com/en-gb/global/news-and-insights/publications/implications-of-sustainability-and-esg-for-the-securitisation-market> accessed 25 June 2021.

UK.[146] Whilst in these cases ESG considerations attach primarily to the use of proceeds and not *per se* to ESG as a credit risk, they illustrate the proliferation of sustainability in capital markets more generally and provide an illustrative example of the current state of market demand.

In light of this it is necessary to address the relationship between CMBSs, CRAs and ESG at each relevant level of the transaction. However, as CMBS transactions may vary in terms of their type – including single borrower transactions, multi-borrower fusions, large loan pools and collateralised loan obligations – the following presentation of securitisation transaction will focus on the common features of the different types of CMBS transactions. Importantly, the study will be limited to elements that bear relevance in terms of ESG risk in CMBSs.[147]

3.2. Securitisation transaction

3.2.1. Loan portfolio

The first stage of the transaction involves the selection of assets that will be pooled together. As described earlier, the underlying asset pool consists of economic assets or credit risks depending on whether the transaction occurs in the form of traditional or synthetic securitisation.[148] In terms of the collateral, within EU commercial real estate can refer to any income-producing real estate, either already existing or under development.[149] However, social housing and properties owned by the end-users are excluded from the scope of the definition.[150] Consequently, the security on the underlying commercial real estate loan used for a CMBS transaction could be anything between office building, retail property, multi-family complex, hotel, self-storage space or even an asset with infrastructure-like characteristics, such as an airport.[151]

With regards the quality and sustainability considerations relating to the underlying loans pooled into the asset portfolio, there has occurred a general increase in the incorporation of sustainability considerations into financial arrangements on *inter partes* basis. From the point of view of CMBSs, the proliferation of this rhetoric and its potential impact on commercial real estate lending is important at least in three respects. First, under article 8(1)

[146] ibid.
[147] Fitch Ratings, 'EMEA CMBS and CRE Loan Rating Criteria' (n 71) 2.
[148] Haentjens and De Gioia-Carabellese (n 132) para 14.2.6.
[149] Disclosure RTS (n 130) art 2(b)
[150] ibid.
[151] Solomon and McCluskey (n 138) 402.

of the Taxonomy Regulation, large public-interest entities and parent entities of large groups with an average number of 500 employees, together with undertakings whose transferable securities are admitted to trading on a regulated market and credit institutions, will be required to disclose the extent to which their activities qualify as environmentally sustainable.[152] Due to the importance of real estate sector in real economy, those market participants falling within the scope of taxonomy – including banks – may be increasingly incentivised to align their lending practices and credit-granting processes with sustainability considerations.[153] Furthermore, as certain commercial organisations are required to disclose the extent to which their economic activities align with sustainability and in the prudential context to form an understanding of and monitor the risks deriving from ESG on an ongoing basis, originators of securities are arguably likely to survey the sustainability factors and especially ESG exposures in relation to the existing and future debt finance in some detail.[154]

Second, an additional benefit is the implicit effect of the EU Taxonomy in developing more standardised terminology for ESG; from a perspective of CRA such standardisation is of importance because together with the use of unverified data, the lack of standardisation could affect rating accuracy.[155] In addition to the terminology gradually maturing, addressing sustainability at a loan level may protect the later investors in CMBSs from sustainability washing, referring to claims which provide misleading, inaccurate or inflated view of sustainability credentials.[156]

Third, and most importantly, incorporation of ESG into real estate financing has been found to have a "materially positive impact" on global markets due to reduced likelihood of default, meaning that credit risks are better controlled in such loans.[157] However, it should be noted that in the field of commercial real estate it would seem likely that the parties would in any

[152] Council Regulation (EU) 2020/852 of 18 June 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 [2020] OJ L 198/13 (Taxonomy Regulation), art 8(1); Parliament and Council Regulation (EU) 2013/34/EU of 22 October 2014 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC (consolidated version) [2014] OJ L 182/19, arts 2(1)(a) and (b), 19a and 29a.
[153] ECB, 'Guide on climate-related and environmental risks: Supervisory expectations relating to risk management and disclosure' (November 2020) <www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks~58213f6564.en.pdf> accessed 27 June 2021, 4.
[154] ibid.
[155] H Worthington and V Judd, 'Can the Sustainability Linked Loan Deliver Lasting Chance?' (2021) 138(2) Banking L J 103, 106.
[156] ibid.
[157] ibid 107.

case incorporate provisions relating to inter alia cash flows, for instance in the form of occupancy ratios, as well as land contamination and environmental claims into the terms and conditions of the loan agreements. This is because such elements relating especially to the environmental and social dimensions of ESG can be regarded as directly affecting loan level credit risk and ultimately, the credit risk associated with a CMBS.[158] However, it should be noted that the terms and conditions of the original loans may vary extensively.

Still, in view of the potentially increasing alignment of commercial real estate lending with sustainability, market-driven initiatives should be addressed in order to form a comprehensive understanding of ESG and its relationship with credit risk at loan level. Whilst the frameworks in question are based on voluntary application requiring the parties to the financing arrangements to hold sufficient economic intention and interest to utilise the instruments, there exists a strong market demand for sustainability.

In collaboration with Asia Pacific Loan Market Association and Loan Syndications and Trading Association, Loan Market Association (LMA) has developed Sustainability Linked Loan Principles (SLLPs) which provide a prime example of the shift towards sustainability in the field of debt finance.[159] Alongside SLLPs, instruments focusing exclusively on the environmental dimension of ESG in real estate finance have also emerged.[160] SLLPs comprise of five core components. First, parties to the loan agreement determine key performance indicators (KPIs), the purpose of which is to improve the overall sustainability profile of the original borrower over the term of the loan.[161] Improvements and progress are measured through KPIs.[162] Second, the parties calibrate sustainability performance targets (SPTs) per KPI. In other words, this refers to setting ambitious and meaningful targets which the borrower commits to until the loan matures.[163] Third, it is necessary to tie the SPTs to economic outcomes, meaning that as the borrower meets the set targets, the success will be

[158] ECB (n 153).
[159] 'Sustainability Linked Loan Principles' (Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association May 2021) <www.lma.eu.com/application/files/8416/2210/4806/Sustainability_Linked_Loan_Principles.pdf> accessed 1 June 2021.
[160] 'Guidance on the application of the Green Loan Principles in the real estate finance (REF) lending context: Retrofit Projects' (LMA October 2020) <www.lma.eu.com/application/files/9116/0552/7477/02_LMA_Case_Study_REF_Investment_Retrofit_V05.pdf> accessed 21 June 2021;'Guidance on the application of the Green Loan Principles in the real estate finance (REF) investment lending context: Green buildings' (LMA October 2020) <www.lma.eu.com/application/files/2316/0552/7456/01_LMA_Case_Study_REF_Investments_Green_Buildings_V06.pdf>, accessed 21 June 2021.
[161] Sustainability Linked Loan Principles (n 159).
[162] ibid.
[163] ibid.

reflected for instance as a reduction in interest rate.[164] Fourth, borrowers should deliver the lenders information on the sustainability-related performance for monitoring purposes.[165] Fifth, the performance level against the SPTs for each KPI will have to be verified by an external and independent party.[166] It is recommended that the report drafted by the verifying party is made publicly available.[167]

Whilst the above considerations may affect the incorporation of ESG credit risk indirectly, they may have a direct impact on the credit risk associated with CMBSs. Greater adoption of SPTs and KPIs at the underlying loan level could decrease credit risk in the long run which is of emphasised importance given that often the aim of a CMBS is to ensure that returns are stable and durable. If the CMBS is able to deliver accordingly, it is implicit that the borrowers on the underlying loans have retained their ability to make payments of principal and interest in accordance with the terms of the debt obligations. This in turn emphasises the governance dimension of ESG which will be discussed in detail in Part 4. Moreover, the fifth point relating to reporting to lenders and publication of these reports could also enable investors to conduct sufficient due diligence in relation to their investment in a CMBS as they have at least in theory an unusual access to loan-level information.

Nevertheless, if some of the above suggestions are reversed, it is equally valid to argue that greater use of sustainability-related incentives tied to the cost of debt could at least theoretically increase the likelihood of default on the underlying loans and consequently, on a CMBS. If the terms of the loan includes provisions that link the SPTs to of debt, i.e. a breach of a SPT results in a margin cost penalty, this could affect the ability of the borrower to make payments as they fall due and thus, disrupt the cash flows necessary for a CMBS transaction to succeed.

In either case, this begs for more detailed examination of the relationship between ESG and the likelihood of default. *Eichholtz et al* have studied the impact of corporate social responsibility (CSR) performance with the ability of the borrower to raise capital, as well as the price of it, confirming that strong CSR performance correlates positively with both the ability of the entity to access capital and lower price of debt.[168] Additional analogies could

[164] Worthington and Judd (n 155) 104; ibid.
[165] ibid.
[166] ibid.
[167] ibid.
[168] P Eichholz et al, ‘Environmental performance and the cost of debt: Evidence from commercial mortgages and REIT bonds’ (2019) 102 J Bank Financ 19.

be sought from research conducted in the field of residential buildings. In this regard scholarship has found that especially strong energy performance and energy certification hold the potential to affect the value of the asset positively.[169] This means that because markets value such properties highly, it is possible to recover greater sums from the realisation of the property if a default occurs than it would be were the energy performance level not certified.[170] However, the importance of energy performance may be of more express importance in certain European jurisdictions because it may not be possible to convey buildings lacking energy certification to third parties in the first place. Consequently, the lack of such certificate may constitute a legal barrier for the realisation of the asset and at least in theory affect credit risk momentarily, as well as prevent the parties to take the sometimes necessary rapid action in situations of financial distress especially if the objective is a successful corporate rescue.[171]

Conclusively, *An* and *Pivo* have found that strong sustainability performance relates to reduced risk of default on the underlying loan.[172] Further, *Devalle et al* have discovered a direct nexus between strong ESG-related performance and higher credit ratings.[173] The perspective appears to be in line with the findings of inter alia *Eichholtz et al*, who have further concluded that real assets which have obtained verification in terms of their environmental performance are considered less risky both individually and on portfolio level.[174]

Hence, the issue is not necessarily that ESG as a concept would not be recognised in securitised products such as CMBSs. However, one of the most pressing challenges is that information on the financing agreements of private companies is scarce and analysis conducted by CRAs may not equal to a detailed assessment of the terms and conditions relating to the underlying commercial mortgage and property. This could be problematic especially before the use of SLLPs and binding regulatory regimes encouraging or obliging borrowers and other relevant parties to make public disclosures stabilises. Nevertheless, in

[169] M Hyland et al, 'The value of domestic building energy efficiency — evidence from Ireland' (2013) 40 Energy Econ 943, 950.
[170] ibid.
[171] See e.g. Act on the Energy Performance of Buildings (*laki rakennuksen energiatehokkuudesta*) 50/2013, s 6 (FIN).
[172] X An and G Pivo, 'Green Buildings in Commercial Mortgage-Backed Securities: The Effects of LEED and Energy Star Certification on Default Risk and Loan Terms' (2020) 48(1) Real Estate Econ 7, 7.
[173] A Devalle et al, 'The Linkage between ESG Performance and Credit Ratings: A Firm-Level Perspective Analysis' (2017) 12(9) Intl J Bus Manag 53.
[174] P Eichholtz et al, 'Doing Well by Doing Good? Green Office Buildings' (2010) 100(5) Am Econ Rev 2492; P Eichholtz et al, 'Portfolio greenness and the financial performance of REITs' (2012) 31(7) J Intl Money Finance 1911.

comparison to private entities that focus solely on the provision of ESG opinions, i.e. ESG rating agencies, traditional credit rating agencies benefit from access to private data. This in turn means that private information deriving from the management and/or board of directors of the issuer or originator may provide insights into relevant sustainability aspects even if the analysis of credit risk is based on portfolio level assessment in preference to a more detailed loan-level analysis.[175] Further, the above considerations could be better integrated into credit ratings by developing the legal documentation that is used at the loan level with a view of standardising approaches to sustainability-linked considerations affecting credit risk. This would equally help CRAs in the mission to assign CMBS accurate ratings as well as enable investors to conduct sufficient due diligence on the relevant and material exposures.

By the end of year 2020, the market share of sustainability linked loans amounted to US$120 billion.[176] Therefore, given that the market for sustainable finance is growing exponentially, the significance of such evolution should not be underestimated in the context of securitisation and CMBSs either. Even in transactions that are not inherently aligned with sustainability-linked considerations or which do not qualify as eligible activities under the EU Taxonomy, the established positive correlation between strong ESG performance and financial position of borrowers may provide sufficient incentive for further developments in the area of ESG and the integration of sustainability into lending practices. Furthermore, as commercial organisations falling especially within the scope of the EU prudential regime are subject to increasing supervisory and progressively even regulatory demands relating to ESG exposures and risk management, access to finance may become challenging for borrowers that fall short in terms of expected alignment with sustainability considerations. Illustrative example of this are exclusion policies based on negative screening criteria utilised by banks.[177] Vice versa, positive screening could result in reductions in the cost of capital and thus, diminishing credit risk associated with CMBSs.[178] In light of this it may be

---

[175] See e.g. Prudence Ho, 'Rating agencies boost ESG risk analysis' *Reuters* (18 November 2019) <www.reuters.com/article/rating-agencies-boost-esg-risk-analysis-idUSL8N27Y2DE> accessed 24 June 2021.

[176] Shilpi Singh and Taiana Vanzellotti, 'Sustainability-Linked Loans 2021: The COVID-19 Effect, ESG Ratings & Continued Popularity' (*Sustainalytics*, 15 April 2021) <www.sustainalytics.com/esg-research/resource/corporate-esg-blog/sustainability-linked-loans-2021-the-covid-19-effect-esg-ratings-continued-popularity> accessed 24 June 2021.

[177] 'Brown Taxonomy Could Standardise Negative ESG Screening' (Fitch Ratings 18 December 2020) <www.fitchratings.com/research/banks/brown-taxonomy-could-standardise-negative-esg-screening-18-12-2020> accessed 25 June 2021.

[178] R Boffo and R Patalano, 'ESG Investing: Practices, Progress and Challenges' (OECD 2020) <www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf> accessed 25 June 2021.

necessary for CRAs too to update their methodology and other analytical tools to better consider ESG in credit risk assessment, as well as for the regulation to more expressly incorporate ESG at least into the regulation applicable to CMBS as structured products.

3.2.2. Structuring

The selection of assets and cash flows into the asset pool is followed by the conversion of them into negotiable securities.[179] However, prior to a more comprehensive discussion it should be noted that the following argumentation shall not consider legislation that relates to the technicalities of establishing and organisation of a SSPE – an entity playing an integral part of securitisation transaction – as such provisions are commonly covered in the national company or commercial organisation laws of EU Member States. Furthermore, because the arguments put forward in the following paragraphs apply to a diverse range of different types of structured finance, the nature of the discussion shall more general. In view of this, the focus will be on the study of certain features that will also be relevant in relation to the discussion set forth in Part 4 of this paper.

Within a bank-driven market segment, it is common for the originator to transfer the pool of assets to a SSPE which consequently becomes entitled to the cash flows generated by the underlying loan portfolio. For the assignment to qualify as a true sale and thus, conventional securitisation, the transaction tends to occur in the form of legal assignment at a par value.[180] Generally speaking, if the transfer qualifies as true sale, the assets will not be available either to the originator or its creditors in the event of financial distress, thus resulting in stronger investor protection.[181] However, from an investor point of view it should be borne in mind that securitisation is ultimately a mechanism that allows the originating institution to decentralise the risk of default to other market participants. [182] Therefore, an investor will retain the risk of losing her investment.[183]

As an alternative to the true sale and removal of the pool of assets from the balance sheet of the originator bank, securitisation may occur in the form synthetic transaction. Synthetic securitisation means that the underlying loan portfolio remains on the balance sheet of the

---

179 J Pinto and A Alves, 'The economics of securitization: Evidence from the European markets' (2016) 13(1) Invest Manag Financial Innov 112, 112; P Rajapakse, 'An Analysis of the Concept of Mortgage-Backed Securities: An Economic and Legal Perspective' (2011) 10(1) JLFM 1, 1 – 2.
180 ibid 114; ibid 2.
181 Pinto and Alves (n 179) 115.
182 S Titman and S Tsyplakov, 'Originator Performance, CMBS Structures, and the Risk of Commercial Mortgages' (2010) 23(9) Rev Financ Stud 3558, 3669.
183 ibid.

originator and only the credit risk associated with the asset is transferred to the SSPE for instance by way of credit derivative or financial guarantee.[184] From a legal point of view the benefit of choosing synthetic securitisation relates inter alia to a valid transfer of the assets under property laws: Especially in civil law tradition, notification or consent from a debtor is a legal requirement for the assignment to be considered valid.[185] Depending on the size of the asset pool used in the transaction, notifying or obtaining the consent of thousands of borrowers at the best would be practically impossible.[186] Further, even if under the applicable law undisclosed transfer of the assets was possible, original debtors would be able to discharge their obligations by paying the creditor of the underlying loan any outstanding amounts. This means that if the originator becomes financially distressed and ultimately insolvent, in the absence of recognition of common law trusts investors in the CMBSs would not be protected because the creditors of the originator would have a claim against assets belonging to the insolvency estate of the originator.[187] Avoiding such hurdles speaks for synthetic securitisations especially as in comparison to conventional securitisations, synthetic transactions have managed to escape certain regulatory provisions in EU. This is inter alia due to the lack of systematic and publicly available information on the market, volume and historical performance of such securitisations and asset classes.[188]

Whether the transaction is classified as conventional or synthetic may also bear relevance in terms of ESG in the prudential regime.[189] This is because the treatment of the transaction varies depending on whether the transaction occurs on- or off-balance sheet. SSPEs are not by definition classified as financial institutions in the meaning of the Capital Requirements Regulation and Directive (CRR and CRD) as the primary purpose of the entities is to enable

---

[184] Pinto and Alves (n 179) 115; A Delivorias, 'Synthetic securitisation: A closer look' (European Parliamentary Research Service Briefing, June 2016) <www.europarl.europa.eu/RegData/etudes/BRIE/2016/583848/EPRS_BRI%282016%29583848_EN.pdf> accessed 24 June 2021, 2.

[185] Worthington and Judd (n 155) 235.

[186] ibid.

[187] ibid. This analysis is inherently linked to the determination of applicable law. See e.g. Parliament and Council Regulation No 593/2008 of 17 June 2008 on the law applicable to contractual obligations (Rome I) (consolidated version) [2008] OJ L 177/6.

[188] EBA, 'Report on STS Framework for Synthetic Securitisation under Article 45 of Regulation (EU) 2017/2402' (6 May 2020) <www.eba.europa.eu/sites/default/documents/files/document_library/News%20and%20Press/Press%20Room/Press%20Releases/2020/EBA%20proposes%20Framework%20for%20STS%20Synthetic%20Securitisation/883430/Report%20on%20framework%20for%20STS%20syntetic%20securitisation.pdf> accessed 25 July 2021, para 15.

[189] Parliament and Council Directive No 2013/36/EU of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (consolidated version) [2021] OJ L 176/338 (CRD), art 98(8).

securitisation transactions to occur in preference to *per se* participation.[190] Consequently, the ESG related considerations that could indirectly affect the CMBS transaction under CRR do not always apply to a SSPE.

Having said that, whilst this can be interpreted to partially manifest the conventional nature of securitisation as a transaction that reduces regulatory costs and which by and large benefits from regulatory arbitrage, SSPEs do not completely escape the impact of the CRR regime, the general objective of which is to strengthen the ability of banks to endure risks inter alia through risk management.[191] This is *inter alia* because banks are under the CRR framework required to assess the underlying exposures resulting from the economic substance of the structure of the securitisation transaction, as well as the risks deriving directly from the structure of the transaction, on the basis of the retention requirement deriving from articles 405 and 410 of CRR.[192] Moreover, because SSPEs are often incorporated as empty shell entities practically unable to make strategic business decisions, the originator remains in control of a magnitude of strategic determinations relating to the transaction. Therefore, ESG-driven credit risks inherent in the underlying assets affect the originator at least indirectly and consequently, may require the originator to have regard to the ESG exposures in terms of their identification, calculation and disclosures. This holds truth also in the context of supervisory expectations; for instance, ECB expects banks to make informed strategic and business decisions which display that the institutions understand the impact of sustainability exposures in different time horizons, as well as to internalise ESG considerations into their business strategies and risk management and appetite regimes.[193]

In addition to the transfer of a loan portfolio or credit risk, the transaction is structured with a view of creating different tranches. This means that risks become diversified by way of grouping exposures to different tranches.[194] Tranching enables the establishment of different classes of priorities in securities. This also allows risk being allocated amongst investors in accordance with their risk appetites. Hence, tranches with more senior rankings should carry less risk and often lower yield whilst junior tranches involve more risk and correspondingly a potential for higher returns.

---

[190] CRR (n 123) art 4(1)(66); Securitisation Regulation (n 128) art 2(2).
[191] Pinto and Alves (n 179) 115.
[192] CRR (n 123) arts 405 and 410.
[193] ECB (n 153) 4.
[194] Technical Committee of the IOSCO (n 52) 4; CRD (n 189) art 4(1).

Thus, priority classes are followed by lower-ranking tranches, such as mezzanine and junior notes, which are burdened by the aggregate credit risk.[195] Additionally, a structured product such as CMBS may also include an equity level which consists of the amount of over-collateralisation and accumulation of payments of principal and interest that exceed the amounts required to be paid against the principal and interest on the security.[196] As a general rule and in accordance with waterfall principle, the holders of subordinated tranches will receive payments only after the claims of more senior creditors have been satisfied. However, as touched upon in the previous paragraphs, the attractiveness of the junior notes may be enhanced via contractual arrangements aiming to the distribution of high interest return in benign economic circumstances. Given that commercial real estate is exposed to economic cycles, the junior notes of a CMBS may therefore be subjected to greater volatility.

Each tranche is subsequently attributed with a credit rating.[197] According to IOSCO, rating process in the context of structured finance may appear reversed in comparison to more traditional manner of issue ratings.[198] This means that the originator determines *ex ante* the rating that it will seek for the specific tranche and designs the transaction accordingly. In terms of sustainability, given the relative unpredictability of the nature of ESG credit risks there may be room for an argument that discrepancies will become more common, resulting in misalignment between the credit rating that is being sought and the credit rating that is actually obtained, thus calling for a comprehensive understanding of the impact of ESG credit risk on the asset and in credit ratings. Alternatively, it is possible to argue that the originator will be required to possess a thorough understanding of the risks attaching to the underlying asset for the purposes of deal design.[199]

Developing and identifying methodology and modelling which incorporate validated or verified ESG data would therefore address any potential conflicts that derive from the relationship between the design of the structure of the CMBS transaction and the challenges this design approach poses in terms of material and relevant ESG exposures. Such evolution could prove particularly beneficial if the originator has indeed failed to form a comprehensive understanding of the potential sustainability risks prior to initiating the transaction or is incentivised to appear more aligned with sustainability-related

[195] Gullifer and Payne (n 10) ch 9.3.3; X An et al, 'What is Subordination About? Credit Risk and Subordination Levels in Commercial Mortgage-backed Securities (CMBS)' (2015) 51 J Real Estate Finance Econ 231.
[196] Technical Committee of the IOSCO (n 52) 5–6.
[197] ibid 5.
[198] ibid.
[199] ECB (n 153).

considerations in order to obtain more favourable ratings for the tranches than they are actually deserving of.[200]

Therefore, it would be left to CRAs as gatekeepers to assess hard and soft information relating to the tranche to determine the *de facto* quality of the credit objectively and to validate the claims of the issuer or an originator. On one hand, examples of hard information include loan-to-value ratio which refers to the ratio between the mortgage to the value of the property: The higher the ratio, the more leverage is involved, which in turn results to a higher level of risk.[201] Another element is debt coverage ratio which refers to the operating income available for payments of principal and interest towards the underlying loan.[202] On the other hand, soft information relates to qualitative information, such as the likelihood with which tenants in the underlying real estate will renew their leases and geographic location of the asset.[203] Given the first mentioned role of CRAs as gatekeepers and verifiers of claims made by the issuer or originator, it may be reasonable to ask whether ESG performance should actually be understood as a question of corporate governance rather than an independent determinator of financial performance that should be considerate as a separate element in credit ratings.[204]

Moreover, if the tranche is attributed with a rating not corresponding with the intention of the issuer or originator as strategic decision maker, the scattered and still developing approach to ESG as a credit risk could incentivise the phenomenon of rating shopping, i.e. an issuer soliciting credit ratings from several CRAs with a view of choosing the most favourable one of them.[205] It is arguable that rating shopping in particular could ultimately result in herding behaviour amongst CRAs as the institutions adjust their assessments of CMBSs with a view of making the rating to converge with ratings issued by other CRAs.[206] An important problem from the point of view of the rating agency is that the institution may be in breach of its duties if it assigns a rating that it knew or ought to have known to be false

---

[200] ibid.; S Park, 'Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution' (2018) 54 Stan J Intl L 1, 6.
[201] ibid.
[202] ibid.
[203] ibid.
[204] T Cort and D Esty, 'ESG Standards: Looming Challenges and Pathways Forward' (2020) 33(4) Organ Environ 491, 493.
[205] See e.g. ESMA, 'Guidelines on Disclosure Requirements for Initial Reviews and Preliminary Ratings' (Consultation Paper, 26 May 2021) <www.esma.europa.eu/sites/default/files/library/esma_33-9-413_consultation_paper_on_disclosure_requirements_for_initial_reviews_and_preliminary_ratings.pdf> accessed 28 June 2021.
[206] See e.g. X An et al, 'Reputation, Information, and Herding in Credit Ratings: Evidence from CMBS' (2020) 61 J Real Estate Finan Econ 476.

or misleading, or by failing to adjust an erroneous rating that has been already assigned to a tranche in a timely manner.[207] However, proving that such misjudgements were material enough to meet the standard of intentionality or gross negligence could prove challenging, as will be discussed below.

It is fundamental that information affecting the risk associated with tranches is accurately assessed both from the point of view of investor protection and the regulatory use of credit ratings, highlighting the role of CRAs as gatekeepers and quasi-regulators.[208] Nevertheless, in this regard the economic realities should also be considered. In the context of structuring the transaction this means that the approach to ESG in credit ratings should at least initially be based on risk even if certain regulatory instruments promote a perspective which emphasises the alignment or eligibility of, inter alia, economic activity with sustainability. This is because understanding the positive impact of ESG and reflecting it in terms of discounts on tranches could turn out to be an arbitrary exercise and result in legal uncertainty especially until robust regimes of verification and validation of ESG-related information fully evolve; currently, it is relatively challenging to predict the long-term effects of ESG factors on cash flows and consequently, the pricing of the tranches in the context of positive scenarios.[209]

3.2.3. Trading in secondary markets

Once structured, CMBSs may or may not be admitted to trading in secondary markets. The following discussion shall start from the assumption that the securities created as a result of structuring will be admitted to trading. However, the considerations shall not touch on matters relating to prospectuses.[210]

The basic rationale for making an investment in a structured product such as CMBS in the first place is that the investor will expect to receive payments of principal supplemented by interest.[211] Therefore, a central concern for market participants is the likelihood with which the original borrower will be able to make repayments and hence, whether particularly the

[207] Coffee (n 28) 9; Fox (n 55) 1091.
[208] An et al (n 195) 503.
[209] UN Principles for Responsible Investment (UNPRI), 'ESG incorporation into securitised products: the challenges ahead' (5 May 2021), 14.
[210] Parliament and Council Regulation (EU) No 2017/1129 of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC [2021] OJ L 168/12.
[211] 'Guide to Credit Rating Essentials' (S&P Global Ratings 2018) <www.spratings.com/documents/20184/774196/Guide_to_Credit_Rating_Essentials_Digital.pdf> accessed 28 June 2021, 6.

cash flows on the obligations remain sufficiently consistent and timely in contrast to the underlying loan becoming a non-performing one, consequently affecting the performance of the structured product.[212]

It is around this notion that the business model of rating agencies revolves: Piercing the veil of asymmetric information within markets by providing opinions on the credit risk associated with, in this case, fixed-income instruments offered to investors.[213] These opinions are critical to the participants of securities markets who are largely dependant on the representations put forward by the issuer.[214] By pledging their aggregated reputational capital, CRAs can verify statements describing the expected credit quality.

Hence, if examined from a perspective of an investor, credit risk can be translated into an analysis of the degree of risk involved in the investment.[215] Consequently, based on credit ratings, investors should be able to make informed decisions regarding whether they are willing and able to assume the risk associated with the CMBS.[216] It is arguable that as the complexity of and innovation within securities markets and instruments intensifies and adds a layer of opaqueness hindering the ability of investors to make independent and objective judgements in relation to the investment, reliance on credit rating will correspondingly increase.[217] Therefore, failures of CRAs in relation to the rating of ESG risk in complex structured products such as CMBSs may at a micro level result in investors being misled and at a macro level to distortions within the wider financial system.[218] However, it should be further noted that credit ratings matter to originators of CMBSs as well. Alongside the regulatory uses of ratings, this derives from the contribution of CRAs to positive and negative outcomes of securities issuances and thus, the likelihood with which financing is obtained may decline or increase in response to a negative or positive credit rating outlook. In other words, a poor credit rating may create certain barriers of entry to capital markets.

Credit rating agencies are not parties or signatories to securitisation transactions.[219] Therefore, regardless of the multiple parties involved in such transactions and securities markets more generally, it is arguable that the duties of rating agencies are ultimately owed

[212] White (n 50) 212.
[213] ibid 212–213.
[214] Kraakman (n 106) 93 – 94.
[215] A Lee, 'Credit rating agencies – do they adequately fulfil their gatekeeper role in debt capital markets?' (2015) JIBLR 30(2) 82, 83.
[216] Kraakman (n 106).
[217] Lee (n 215) 84.
[218] ibid 85.
[219] L Marsland-Shaw, 'Evaluating an asset-backed transaction' (1991) JIBL 6(2) 64, 64

to investors.[220] These duties have been eminently recognised by an Australian court; the *Bathurst* ruling highlighted the reasonable care a CRA must exercise and the prerequisite reasonable grounds on which the rating must be founded.[221] In Europe, *Landgericht Berlin* has similarly found a rating agency liable for assigning a misleading rating for a bond. [222]

Submissions to similar effect can be found from EU legislation. The basic premise is that investors are the most vulnerable participants in securities markets and in addition to the intrinsic importance of this acknowledgement, sufficient safeguards are also a central concern in terms of ensuring financial stability more broadly.[223] Therefore, the relationship between CRAs and investors can be understood to derive from the conventional theory of financial markets only partially because the interest to provide sufficient safeguards to investors is not confined within the traditional notion of information resulting in better informed investment decisions.[224] Instead, reinforcing investor protection regime is also connected to the overall financial stability objective.[225] Hence, the ability and willingness of a CRA to provide investors with an accurate and objective opinion concerning the credit quality of a rated product carries both narrower and wider importance. Still, from the narrow perspective, this proposition results in a partially paradoxical conclusion because the regulator would simultaneously prefer seeing less reliance on credit ratings, as discussed above.

In light of this, the credit rating industry and its major participants – S&P, Fitch, and Moody's – have recognised the central importance of credit ratings and acknowledged the need for additional clarity especially with regards the role of ESG factors on rating processes.[226] However, the past and present misconduct on CRAs behalf raises doubts as to the ability of the institutions to produce ratings without being in breach of their duties

[220] ibid.
[221] *ABN AMRO Bank NV v Bathurst Regional Council* [2014] FCAFC 64 (AU).
[222] LG Berlin, 05.05.2020 - 11 O 5/19 (GER).
[223] M Andenæs and I Chiu, *The foundations and future of financial regulation: governance for responsibility* (Routledge 2014), 136.
[224] Marsland-Shaw (n 219) 64–65.
[225] Andenæs and Chiu (n 223) 136.
[226] UNPRI, 'Statement on ESG in credit risk and ratings' <www.unpri.org/credit-risk-and-ratings/statement-on-esg-in-credit-risk-and-ratings-available-in-different-languages/77.article> accessed 20 August 2021.

towards investors in securities markets.[227] It is arguable that the inclusion of the still developing concept of ESG into credit ratings could surface a new set of challenges especially in terms of analytical tools used by rating agencies, thus affecting rating accuracy and consequently, compromising the notion of investor protection even further.

This concern is not in vein in the context of CMBSs and ESG given that in the US the Securities and Exchanges Commission (SEC) issued a cease-and-desists order against S&P in the US in 2015 for knowingly disseminating misleading information to investors on the methodologies used to rate certain CMBSs.[228] Furthermore, Moody's settled a case owning similar facts with the US Department of Justice in 2017.[229] The rating agency admitted having focused only on the qualities of the highest rated elements of a security offering whilst still informing investors that the exact same methodology was applied to the product throughout.[230] This resulted in inflated ratings being assigned to securities transactions, meaning that the rating indicated that the product was safer than it *de facto* was.[231]

The above examples suggest that CRAs may not be adequately incentivised to promote the interest of investors without further controls being imposed. Believing otherwise could easily result in an erroneous and dangerous narrative which emphasises the ability of CRAs to conduct their business transparently, objectively and diligently and thus, attribute the past failures one-off characteristics, meaning that the past misconduct is seen as incapable of being repeated.[232]

Due to the critical and central role of CRAs within capital markets it is necessary to understand how the players may be disciplined were infringements of their duties to occur. This is also because an effective enforcement mechanism might accelerate the recognition

---

[227]See e.g. Board of Supervisors, 'Decision to adopt supervisory measure and impose fines with respect infringements by Moody's Deutschland GBH and Moody's Investor Service Limited' (23 May 2017) <www.esma.europa.eu/sites/default/files/library/esma41-137-1005_decision_of_the_board_of_supervisors_to_adopt_a_supervisory_measure_and_impose_fines_with_respect_to_infringements_by_moodys_deutschland_gmbh_and_moodys_investors_service_limited.pdf> accessed 20 August 2021; ESMA, 'Public Notice' (1 June 2017) <www.esma.europa.eu/sites/default/files/library/esma71-99-478_public_notice_moodys_germany_and_moodys_united_kingdom.pdf> accessed 20 August 2021; Board of Supervisors, 'Decision to adopt supervisory measures and impose fines in respect of infringements committed by Moody's UK' (Decision 2021/1, 23 March 2021) <www.esma.europa.eu/sites/default/files/library/esma41-356-114_decision_1-2021_moodys_uk.pdf> accessed 20 August 2021.

[228] Cash (n 110) 282–283.

[229] ibid.

[230] ibid.

[231] ibid.

[232] ibid 283–284.

and incorporation of ESG considerations into credit quality analysis more consistently. Such attempts to enforce could develop the concept further through the judiciary because litigation and potential enforcement could successively result in formal regulatory action and effects.[233]

In addition, an established legal regime setting out the liability regime plays a particularly important role in the credit rating industry in the absence of any express contractual relationship between a CRA and an investor. The nature of the relationship differs from that existing between the issuer and CRA whose relationship is certainly governed under the general rules of contract law of the relevant EU Member State.[234] Therefore, article 35a of the CRA Regulation III sets forth a civil liability regime for credit rating agencies and allows an investor to claim damages if a two-part test is met. First, according to article 35a(1), it has to be shown that the rating agency's intentional or grossly negligent infringement included in the Annex III has affected the assigned credit rating. The onus of proof and responsibility to present accurate and detailed evidence concerning the breach is on the investor or issuer of the securities.[235] Under article 35a(2), it is stated that determining the meaning of accurate and detailed evidence shall be within the discretion of national courts. Second, the investor has to be able to show reasonable reliance on the rating for a decision to invest into, hold onto or divest from instrument covered by the rating.[236]

Whilst the liability regime can be argued to represent more robust approach to inaccurate credit ratings, the rules have been criticised for "bearing traits of political compromise" and thus, lacking teeth.[237] For example, the discretion granted to national courts provide leeway for the purpose of interpretation of the actual meaning of the provisions.[238] In addition, in preference to applying a reversed burden of proof, investors must overcome substantial hurdles relating to accurate and detailed evidence indicating that a CRA is in breach of its obligations.[239] Additionally, it is possible to argue that for the liability regime to prove effective measure for the purpose of addressing ESG-driven credit risk elements in a systematic, harmonised and transparent manner, the concept of ESG risk must mature before

---

[233] Analogies could be sought from the field of climate change litigation. H Osofsky, 'The Continuing Importance of Climate Change Litigation' (2010) 1 Climate L 3, 7.
[234] B Haar, 'Civil Liability of Credit Rating Agencies after CRA 3 – Regulatory All-or-Nothing Approaches between Immunity and Over-Deterrence' (2013) University of Oslo Faculty of Law Legal Studies Research Paper Series No 2013-02, 3.
[235] CRA Regulation III (n 56) art 35(a)(1).
[236] ibid art 35a(1).
[237] Haar (n 234) 17.
[238] ibid.
[239] ibid 17–18.

an investor will be able to meet the required threshold. In this regard, analogies could be sought from private climate litigation as an area which has previously suffered from a high judicial threshold relating inter alia to proof of damage, defendant conduct and causation.[240] However, due to a shift in legal discourse and gradual evolution of the institutional context, the likelihood of such claims succeeding has increased.[241]

Nevertheless, the liability regime applicable to CRAs contains an important limitation applying to publicly available information provided by the issuer to the credit rating agency which has in itself been misleading.[242] Whilst the provision can be understood as a further precaution preventing the floodgates of litigation from opening, it also shifts responsibility regarding the exercise of due diligence to investors. In terms of investor due diligence, these parties do not generally have similar access to information concerning the underlying exposures as CRAs do, but are reliant on public disclosures also due to scarce resources available to them.[243] It is possible to argue that access to better quality data on the risks and especially ESG exposures would – in accordance with EU policy goals – decrease the reliance of investors on credit ratings and CRAs when participating in capital markets. Hence, the implementation of regimes designed to enhance transparency especially in relation to sustainability could improve the quality of the overall framework and thus, also affect credit ratings of structured instruments, including CMBSs.[244]

As discussed in the preceding paragraphs, certain entities will be required to disclose the extent to which the economic activities they carry out are taxonomy eligible. In terms of disclosures, the regime is further strengthened by Regulation 2019/2088 (SFDR) and Directive 2014/95/EU (NFRD).[245] The rationale underlying the provision can be understood to have a direct nexus with structured products such as CMBSs; it is possible to infer from recitals 22 and 35 of the EU Taxonomy that investors should be able to form an

---

[240] G Ganguly et al, 'If at First You Don't Succeed: Suing Corporations for Climate Change' (2018) 38(4) Oxf J Leg Stud 841, 849.
[241] ibid 850–864.
[242] CRA Regulation III (n 56) art 35a(1).
[243] ESMA, 'Guidelines on Disclosure Requirements Applicable to Credit Ratings' (Final Report, 18 July 2019) <www.esma.europa.eu/sites/default/files/library/esma33-9-320_final_report_guidelines_on_disclosure_requirements_applicable_to_credit_rating_agencies.pdf> accessed 30 June 2021, 3; F De Pascalis, 'Investors' and Market Participants' Over-Reliance on External Credit Ratings: To What Extent Does EU Law Carry This Risk?' (2016) 27(3) EBL Rev 353.
[244] Coffee (n 28); Fox (n 55) 1110.
[245] Taxonomy Regulation (n 153); Parliament and Council Regulation (EU) 2019/2088 of 27 November 2019 on sustainability-related disclosures in the financial services sector [2019] OJ L 317/1 (SFDR); Parliament and Council Directive No 2014/95/EU of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups [2014] OJ L 330/1 (NFDR).

understanding of how the products and services of entities falling within the scope of taxonomy contribute to the EU sustainability agenda.[246] With a view of fulfilling the product empowerments under taxonomy, the ESAs have introduced a proposal for regulatory technical standards on disclosures of financial products that contribute towards a sustainable investment objective.[247]

Such express provisions which may not apply directly to the rating of ESG credit risk in CMBSs, but which bear relevance at a more general level in terms of credit ratings, should be welcomed. This is because it is arguable that insufficient regulation applicable to ESG transparency give rise to opportunism. For example, exploitative modifications to ESG disclosures with a view of demonstrating strong sustainability-related performance in preference to actual commitment to it is not unheard of.[248] *Nazari et al* have concluded that S&P 500 companies may include in their ESG disclosures complex syntaxes that make the information less comprehensible and thus, cover up information that would in fact indicate poor ESG performance.[249] *Michelon et al* have further stated that reports focusing on social responsibility of commercial organisations are sometimes accompanied by such an extensive volume of irrelevant information that this results in the relevant messages and information becoming diluted.[250] These findings are inherently connected to the doctrines of fiduciary duty and loyalty which are "both concerned fundamentally with directors' and officers' stewardship over their firms' information."[251] This can be understood to emphasise the duties of the original borrowers and issuers – as well as originators as the strategic decision makers – in a CMBS transaction towards investors, therefore highlighting the governance dimension of ESG.

Hence, standardising approaches to sustainability reporting and disclosures could in the long run benefit both investors and CRAs. From the perspective of investors, the market

---

[246] ibid art 25; ESAs, 'Taxonomy-related sustainability disclosures: Draft regulatory technical standards with regard to the content and presentation of sustainability disclosers pursuant to Article 8(4), 9(5) and 11(5) of Regulation (EU) 2019/2088' (Joint Consultation Paper, 15 March 2021) <www.esma.europa.eu/sites/default/files/library/jc_2021_22_-_joint_consultation_paper_on_taxonomy-related_sustainability_disclosures.pdf> accessed 23 August 2021.
[247] SFDR (n 245).
[248] Y Eliwa et al, 'ESG practices and the cost of debt: Evidence from EU countries' Crit Perspect Account (forthcoming).
[249] J Nazari et al, 'Assessing social and environmental performance through narrative complexity in CSR reports' (2017) 13(2) J Contemp Account Econ 166.
[250] G Michelon, 'CSR reporting practices and the quality of disclosure: An empirical analysis' (2015) 33 Crit Perspect Account 59.
[251] F Kahn, 'Transparency and Accountability: Rethinking Corporate Fiduciary Law's Relevance to Corporate Disclosure' (2000) 34 Ga L Rev 505, 507.

participants might be able to obtain a better understanding of ESG-related credit exposures especially in terms of complex structured securities such as CMBSs. With regards CRAs, standardising and cementing disclosures relating to ESG exposures could enhance the accuracy of credit ratings especially if the institutions still seek to keep the transaction efficiency relating to the rating of a structured deal to a minimum and issue ratings within a time space of 90 minutes.[252] In addition, rating agencies may be better equipped to distinguish merely symbolic ESG practices from concrete ESG performance due to their focus on determining creditworthiness in preference to providing a sustainability opinions, as well as vet the publicly disclosed information against data which the issuer has privately provided to CRAs. However, even if the wider regime gradually evolves, the empirical challenges relating to the ratings of structured products cannot be ignored and the work should not proceed as if the problems attaching to CRAs were not there.

3.3. Summary of Part 3

Securitisation refers to a transaction in which an originator transfers either loans or the credit risk associated with debt obligations to a bankruptcy-remote entity with a view of transforming debt into tradable commodity. These tradable structured products can subsequently be offered to investors in secondary capital markets or they may be retained by their original holder.

The discussion put forward in this part of the paper has shown that ESG-related considerations bear relevance throughout securitisation transaction. In the context of CMBSs, borrowers on the underlying loans make payments of principal and interest which in turn transform into cash flows capable of generating profits to investors. As these profits are inherently dependant on cash flows which derive from the original debt obligations, sustainability considerations form a fundamental aspect of the assessment of credit quality as it has been shown that ESG correlates with credit risk.

With regards the structure of the transaction, tranching allows the grouping of assets belonging to an asset pool into separate classes of priority. These tranches will subsequently receive a rating indicating the credit risk associated with them. Whilst environmental and social considerations may bear more relevance at a loan-level analysis, especially the structure of the transaction is strongly associated with governance pillar of ESG. This holds true particularly in CMBS transactions because the underlying assets are inherently exposed

[252] Haar (n 234) 1.

to a diverse range of ESG-related risks. In addition, the structure of a CMBS deal is often very complex.

Finally, if CMBS are admitted to trading in secondary markets, relevant ESG considerations relate also to this stage of the transaction. To this effect, credit ratings should be understood as information signals or opinions on the credit quality, thus equally emphasising the duty of investor to conduct due diligence prior to acting on an investment decision relating to a rated CMBS. Hence, whilst CRAs are not contractual parties to the securitisation transaction, both courts and legislation recognise that CRAs owe duties to investors. In spite of this, as ESG credit risk remains largely an unregulated field and there exists no express mandate for CRAs to take into account such risks, it is arguable that the quality and accuracy of ratings may deteriorate and give rise to further gatekeeper failures especially until the liability regime established under CRA Regulation III matures.

4. ESG credit risk

4.1. Architecture of the regime

As was stated at the beginning of this paper, ESG is now considered both on the basis of value and values in financial and capital markets. This means that market participants hold a strong economic interest in ESG.[253] Moreover, whilst the focus has conventionally been on responding to investor demand, in recent years one has witnessed the proliferation of ESG into other fields as well.[254]

In EU, the roots of sustainability can be tracked at least to the year of 1987 when the Single European Act revising the Treaty of Rome and containing Title VII regarding preservation, protection and improvement of the quality of environment; protection of human health; and prudent and rational utilisation of natural resources was enacted.[255] The EU agenda has since assimilated global influences too. For example, an overarching concept of sustainability emerged as a result of the Brundtland Commission report being released in 1987.[256] The report also introduced the very term of sustainable development and set forth a definition covering economy; population and human resources; food security; species and ecosystem;

[253] I Chiu, 'Regulatory reforms towards promoting sustainable finance' (2018) 39(11) Comp Law 349.
[254] S Lovegrove et al, 'ESG regulation: international developments' (2021) 184 COB 1, 1–2. See also e.g. EBA, 'EBA Action Plan on Sustainable Finance' (6 December 2019) <www.eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf> accessed 24 June 2021.
[255] Single European Act [1987] OJ L 169/1, Title VII.
[256] G Brundtland, 'Report of the World Commission on Environment and Development: Our Common Future' (1987) UNGA Doc A/42/427.

energy; industry; urbanisation; the commons; peace; and security, resulting in the subsequent implementation of the term in the EU Strategy for Sustainable Development.[257] Importantly, the Brundtland Report identified the central role that institutional and legal reforms should play in achieving the objectives relating to sustainable development.

Later on the 1992 Rio Declaration on Environment and Development went on to state that "to achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies."[258] In EU, article 2 of the Treaty on the European Union called for a new legal entity to be founded upon the idea of common markets and an economic and monetary union and in doing so, the supranational institution should "*promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States*", thus aligning the functioning of the supranational entity with global calls for sustainability.[259]

According to the High-Level Expert Group (HLEG) on sustainable finance, there exists two primary imperatives for sustainability in the field of finance.[260] First, the financial system should contribute towards sustainable and inclusive growth by directing flows of capital in a manner which is able to address the long-term needs of societies and actions initiated with a view of combating climate change.[261] Second, sustainable finance should be considered as a driver for greater financial stability achievable through the internalisation of ESG into financial decision-making.[262]

Consequently, the EU sustainable finance regime consists of three primary elements. To begin with, EU purports to direct investments to projects addressing the effects of climate change, i.e. to activities which have a positive impact on environment or which support

---

[257] ibid; Commission, 'A Sustainable Europe for a Better Word: A European Union Strategy for Sustainable Development' (Communication) COM(2001) 264 final.
[258] UNGA, 'Report of the United Nations Conference on Environment and Development: Rio Declaration on Environment and Development' (12 August 1992) A/CONF.151/26, principle 8.
[259] C Barnard and S Peers, *European Union Law* (OUP 2014), 178.
[260] The High-Level Expert Group (HLEG), 'Financing a Sustainable European Economy' (Final Report, 2018) <https://ec.europa.eu/info/sites/default/files/180131-sustainable-finance-final-report_en.pdf> accessed 9 June 2021, 6, 9 and 76.
[261] ibid.
[262] HLEG (n 260) 6 and 9; Commission, 'Action Plan' (n 4).

sustainable development.[263] Furthermore, financial decision-making and investment decisions should take into considerations risks deriving from sustainability-linked exposures.[264] Finally, the discipline of finance should be realigned with long-termism as opposed to short-termism.[265]

Sustainable finance has, therefore, evolved from being a mere declaration into a mainstream objective. Still, the European transition has been characterised as a political compromise.[266] Hence, it is unsurprising that the concept is still subject to development and maturing, reflecting also that financial systems and capital markets themselves have conventionally been unsuccessful in understanding society and economy in a wholesome manner.[267] This means that economic activity has been considered in a vacuum and the core of modern financial paradigm continues to be founded on similar principles which underlie the argumentation of school of neoclassical economics, including market efficiency and rational decision-making.[268]

However, instruments such as those relating to taxonomy, benchmarking and sustainability disclosures demonstrate that capital markets are part of a broader economic and social ecosystem and that participants in capital markets are now expected to take concrete steps to implement the policy objectives into practice.[269] Still, notwithstanding the growing institutional support for sustainable finance, divergencies still exist.[270] A prime example of the uneven development is the very regulatory framework applicable to credit ratings; whilst an integral element of the EU sustainable finance regime should be the development of an effective and robust risk management mechanism, the framework currently in force fails to deliver at least in two respects.

First, CRAs are not subject to any express legal mandate to consider ESG credit risk and second, from the point of view of financial instruments, CMBSs fall outwith the scope of all

---

[263] D Claringbould et al, 'Sustainable finance: the European Union's approach to increasing sustainable investments and growth – opportunities and challenges' (2019) 88(2) Vierteljahrshefte zur Wirtschaftsforschung 11, 15.
[264] ibid.
[265] ibid.
[266] Cullen et al (n 60) 2.
[267] W Sun et al, *Finance and Sustainability: Towards a New Paradigm? A Post-Crisis Agenda* (Emerald Publishing 2011), 3.
[268] ibid 5.
[269] Taxonomy Regulation (n 153); Council Regulation (EU) 2019/2089 of 27 November 2019 amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks OJ L 317/17.
[270] Lovegrove et al (n 254) 1.

directly applicable regulation setting forth mandatory sustainability considerations. These lacunas could result in severe complications especially as it has been shown that lenders may be in fact less concerned with absolute credit risks associated with the structured product and more focused on the marketability of the loan.[271] Combined with weak incentives to engage in monitoring the relevant market participants in fragmented capital markets, this could result inter alia in moral hazards arising.[272]

4.2. Defining ESG

Sustainable finance can be understood as "a process of taking due account of environmental, social and governance (ESG) considerations…leading to increased longer-term investments into sustainable economic activities and projects."[273] What this means in practice often depends on the market segment from which sustainability is being assessed. For instance, with regards traditional credit ratings, sustainability tends to refer to considering ESG as part of credit risk assessments. However, the Basel Committee on Banking Supervision (Basel) – the recommendations of which have been implemented in EU legislation – approaches sustainability from a perspective of the impact of ESG-related exposures on banking system.[274] The Task Force established under the Basel Committee is particularly focused on developing a perception of climate-related micro- and macroeconomic risk transmission channels as well as creating a methodology to actually assess and measure these exposures.[275]

That being said, the International Organisation of Securities (IOSCO) as an international body for securities regulators started its sustainability-related work in 2018 by establishing Sustainable Finance Network for the purpose of accommodating the exchange of experiences and understanding amongst its members with regards the meaning of and implications deriving from sustainability in securities markets.[276] A key finding of the IOSCO research relates to the need to improve comparability between sustainability-related disclosures made by issuers of securities and understanding the role of ESG information and

[271] Gullifer and Payne (n 10) para 6.3.2.1.
[272] A perspective to moral hazard is provided e.g. in Z Gubler, 'Regulating in the Shadows: Systematic Moral Hazard and the Problem of the Twenty-First Century Bank Run' (2012) 63(2) Ala L Rev 221.
[273] Lovegrove et al (n 254) 2.
[274] Basel, *Climate-related financial risks – measurement of methodologies* (Bank for International Settlements April 2021) <www.bis.org/bcbs/publ/d518.pdf> accessed 1 June 2021, 4.
[275] Basel, *Climate-related risk drivers and their transmission channels* (BIS April 2021) <www.bis.org/bcbs/publ/d517.pdf> accessed 1 June 2021, 10 – 22.
[276] The Board of IOSCO, 'Sustainable Finance and the Role of Securities Regulators and IOSCO' (Final Report, April 2020) <www.iosco.org/library/pubdocs/pdf/IOSCOPD652.pdf> accessed 12 July 2021, 6.

rating institutions in relation to it.[277] Surprisingly, the organisation has further highlighted the dangers that might arise from a scattered regime that is based solely on voluntary compliance and the lack of legally binding obligations, giving rise to omissions and impairments in terms of providing investors with relevant and material information on ESG exposures.[278] To this effect, in collaboration with International Financial Reporting Standards Foundation (IFRS) the organisation has expressed the urgent need to further develop the completeness, consistency and reporting relating to sustainability.[279] This means that whilst different market participants are gradually required to assess the threats posed by inter alia transition and physical risks and their impact on the financial system and capital markets, information conveyed to investors may in fact be more focused on observing the eligibility or alignment of the structured product with sustainability. The relevance of this can successively be questioned strictly from the point of view of CRAs and ESG credit risk associated with commercial mortgage-backed securities.

4.3. Theoretical framework

The wider theoretical framework in which the above propositions could be observed is one set forth by *Ashforth* and *Gibbs*.[280] According to the scholars, corporate activities can be legitimised either on substantive or symbolic basis: The first refers to objectives, structures and processes which enjoy institutionalised support in a society and the second includes objectives, structures and values which only appear to be aligned with prevailing social values and expectations and which are presented for the sole purpose of convincing other market participants, such as lending institutions, of the apparent commitment to the values and expectations.[281] As pointed out by *Eliwa et al*, research relating to social accounting, also known as non-financial reporting, which has traditionally been critical about ESG practices inter alia because of their arguably lacking relevance has established a more concrete nexus between ESG and the symbolic approach, whilst majority of market-driven scholarship focusing on financial performance embraces the substantive approach.[282] One of the purposes of the following discussion is to demonstrate that lacunas deriving from the

---

[277] ibid 21.
[278] ibid 13.
[279] IFRS Foundation, 'Consultation Paper on Sustainability Reporting' (September 2020) <www.ifrs.org/content/dam/ifrs/project/sustainability-reporting/consultation-paper-on-sustainability-reporting.pdf> accessed 20 August 2021, 5.
[280] B Ashfroth and B Gibbs, 'The Double-Edge of Organizational Legitimation' (1990) 1(2) Organ Sci 177.
[281] ibid 178–186.
[282] Eliwa et al (n 248) 2.

apparent compliance with the prevailing concepts could and should be remedied by legal means in the context of rating ESG-related exposures in CMBSs.

An additional legal theory relates to private public governance. Traditionally, global governance regimes have embraced a State-centric approach, meaning that rules, norms and institutions have been developed by States for States. However, the focus has now shifted as the sovereigns have begun to partner with non-State parties; this has resulted in the provision of governance and reallocation of political authority from public to private actors.[283] The phenomena is often characterised as the decentralisation of governance and legal authority, meaning that the role of States has transformed to a more managerial one.[284] The development has given rise to quasi-public governance regimes.[285]

Whilst ratings produced by CRAs are commonly used by private investors for the purpose of making investment decisions, the products are also utilised by public regulators in risk-sensitive financial regulation.[286] In order to a CRA to carry out credit risk assessments, the institutions should be able to operate relatively autonomously. Keeping this in mind, until the 2008 credit crunch CRAs were controlled primarily by means of self-regulation. Nonetheless, the function and purpose of a CRA overlaps fundamentally with public interest considerations because the relationship between CRAs and States appears as "a form of delegation of governance tasks and (quasi-)regulatory authority from public regulatory bodies to credit rating agencies", however, "once they [credit ratings] are relied upon by public authorities, credit rating agencies fulfil governance functions for global financial markets in conjunction with public actors".[287]

In this sense it is fundamental to acknowledge the interrelations between market practice, legislation and soft law. Keeping this in mind, smart regulation embraces the notion of regulatory pluralism which combines inter alia flexibility and innovation for the purpose of imposing forms of social control inclusive of governments, business organisations and third parties.[288] Therefore, in preference to subjecting business entities exclusively to State imposed, command-and-control type of regulation, smart regulation can be seen as accommodating an understanding of a diverse range of regulatory influences and interactions

[283] Kruck, *Private Ratings, Public Regulation* (n 41) 13—14.
[284] Teubner (n 38) ch III.
[285] J Black, 'Critical Reflections on Regulation' (2002) 27 Austl J Leg Phil 1, 4.
[286] ibid 14.
[287] ibid 20.
[288] N Gunnigham and D Sinclair, *Smart regulation* in P Drahos (ed), *Regulatory Theory* (ANU Press 2017), ch 8.

present in a financial system. The forces play a central role in shaping social and economic contexts and therefore, the notions of co-regulation and self-regulation cannot be bypassed when assessing ESG as a credit risk in CMBSs.

However, some flaws are inherent in this legal design. Under a meta-regulatory approach focused on the promotion of self-regulation, regulatees are themselves expected to develop systems to comply with whilst simultaneously demonstrating compliance with the legally binding obligations imposed by central authorities and traditional regulators. Although the benefits relating to inter alia flexibility and scalability of such a system may be obvious, the very systems and processes are first and foremost designed in a manner which enables the regulatee, i.e. a CRA, to achieve its internally determined corporate objectives.[289] Solving the resulting paradox is challenging because it is not considered an option to reverse the process of liberalisation occurring for example in the form of smart regulation, but simultaneously reducing the amount of red tape within credit rating markets is not a preferable approach either.

From these premises the objective of the following paragraphs is to build upon the more technical analysis set forth earlier in this paper and reflect in more concrete terms considerations that bear relevance in the context of ESG credit risk in CMBS. In other words, the objective is to provide an insight into the current state of ESG integration, “the explicit and systematic inclusion of ESG in investment analysis and investment decisions” by studying relevant market practice, binding regulation and finally soft law.[290]

4.4. Environmental dimension

According to IPCC, financial sector is reactive to climate change and as a result of the dominant role of financing in every business sector and therefore, the banking system is well equipped to promote the integration of environmental and climate considerations overarchingly.[291] Commercial real estate is a prime example of this: As the sector has conventionally relied on financing provided by banks, these institutions are able to influence some of the decisions made in relation to the sustainability profile of buildings. Hence, in the context of CMBSs it is unsurprising that the consideration of environmental and climate matters attaches especially to the commercial property covered by a security right. It is

[289] ibid.
[290] ‘What Is ESG Integration?’ (UNPRI 25 April 2018) <www.unpri.org/investor-tools/what-is-esg-integration/3052.article> accessed 6 July 2021.
[291] J McCarthy, *Climate Change 2001: Impacts, Adaptation, and Vulnerability* (CUP 2001), 38.

arguable that evaluation of the quality and sustainability of the collateral and the review of environmental reviews relating to it are amongst the most important considerations when assessing structured products backed by real estate.[292]

Environmental and climate risks are commonly divided into physical risks and transition risks. On one hand, physical risks include the financial consequences deriving from chronic and acute events relating to climate change such as extreme weather conditions and gradual changes in climate conditions. In terms of environment, the category includes matters such as pollution and waste, biodiversity, water stress, land use and natural conditions which can be classed as exposures likely to cause environmental degradation.[293] Further, the class is inclusive of pollution and waste which could inflict damage to resources.[294] CRAs may also consider current or expected levels of pollution and toxins produced by the operations taking place at the property in the event that there are insufficient procedures in place for handling different types of pollutants and toxins, resulting in the sanctioning of financial penalties potentially affecting cash flows and the quality of the commercial property.[295] As this would also clearly affect the operations undertaken by the occupants of the commercial property, the level of productivity associated with the real asset could be severely deteriorated.[296]

Increased likelihood of default, losses resulting from the materialisation of risks and deflated value of the commercial property require to be addressed by means of law at each relevant level of a CMBS transaction. In other words, it is necessary to gain an understanding on how these risks are being managed throughout the transaction. Hence, the approach can be characterised as bottom-up. The process itself includes the identification of material and relevant exposures when conducting legal due diligence, as well as the drafting and incorporating of necessary provisions into the legal documentation.[297]

On the other hand, transition risks refer to the costs of adjusting. In practical terms, climate and environmental considerations classified as transition risks refer to the costs deriving from changes that occur in policy, regulation, technology and even market sentiment. Therefore, in comparison to physical risks, the approach is more top-to-bottom. Justification

---

[292] UNPRI, 'ESG Incorporation into Securitised Products' (n 209) 18.
[293] Marco Sindaco, 'The Evolution of ESG Risk in Credit Risk Assessment' (*S&P Global*, 27 October 2020) <www.spglobal.com/marketintelligence/en/news-insights/blog/the-evolution-of-esg-factors-in-credit-risk-assessment> accessed 6 July 2021.
[294] ibid.
[295] 'Commentary on ESG Factors in CMBS' (DBRS Morningstar 8 February 2021), 2.
[296] ibid.
[297] ibid 10–11.

for increasing costs and subsequently reducing the yields deriving from transition could, however, be sought from the business case approach.[298] Whilst the implementation of and response to regulatory demands relating to environment and climate change – occurring for example in the form of taxes imposed on non-sustainable economic activities or compliance with mandatory sustainability-linked provisions – the initial impact on commercial organisations may be negative in a sense that appropriate adjustments tend to decrease returns, increase the costs of capital and thus, affect creditworthiness at first.[299] However, according to the business case school of thought, the potential long-term effects affecting financial position positively could override such short-term costs.

An illustrative example of the business case argumentation is the forthcoming revisions of the Energy Tax Directive which aims to align taxes applying to energy and electricity across all sectors of activity, including real estate, with the broader EU sustainability policies.[300] The measures influencing for example cash flows include increased or even punitive expenses as measures that are applied with a view of incentivising activity that aims to decrease the consumption of defined goods or discouraging certain behaviours.[301] With regards commercial real estate and consequently, CMBSs, the benefits of utilising energy efficient solutions, use of alternative energy sources and even beneficial tax treatment could strengthen the financial performance and ensure that cash flows remain stable and durable on a relatively long time horizon.

However, from a perspective of an investor, when the returns from the CMBSs are fixed it is in the interest of the investor that the original borrower simply remains solvent and retains its capability to maximise returns until the maturity date of the structured product.[302] Consequently, it may not always be in the best interest of the investor for a borrower on the underlying loan to improve the environmental and climate profile of the collateral because the benefits of doing so may not materialise in time. Particularly in short and medium term this could arguably contradict the best financial interest of an investor as a beneficiary.[303]

[298] C Bradshaw, 'The Environmental Business Case and Unenlightened Shareholder Value' (2013) 33 Legal Stud 141, 142–145.
[299] Sidiq Dawuda, ‘Linking Climate Transition Risks and Credit Risks’ (*S&P Global*, 21 October 2020) <www.spglobal.com/marketintelligence/en/news-insights/blog/linking-climate-transition-risks-and-credit-risks> accessed 8 July 2021; Commission, ‘Fit for 55: delivering the EU’s 2030 Climate Target on the way to climate neutrality’(Communication) COM(2021) 550 final.
[300] ibid para 2.2.3.
[301] ibid.
[302] Gullifer and Payne (n 10) para 3.2.2.
[303] A Tilba and A Reisberg, ‘Fiduciary duty under the Microscope: Stewardship and the Spectrum of Pension Fund Engagement’ (2019) 82(3) MLR 456.

Therefore, the traditional legal juxtaposition between short and long termism may continue to persist although the general sentiment has focused on the objective of preserving value on long term inter alia by aligning different time horizons in capital markets.[304]

As outlined in Part 3 of this paper, properties affiliated with environmental and climate considerations may obtain higher market valuations as these assets conceivably preserve their value better. In terms of environmental and climate sustainability, an illustrative example of this is how environmental and climate exposures materialise in different geographical areas. For instance, certain areas will be more severely affected by rising sea levels which in turn could either deflate or inflate the credit quality associated with a CMBS depending on whether the collaterals are located in coastal cities or low-lying areas or not.[305] Furthermore, extreme weather conditions such as heat stress can affect the levels of energy consumption and efficiency.[306] Within EU, these considerations are of particular importance because many areas in Europe are prone for example to flooding.[307] From a viewpoint of the original lender and originator of the structured products this means that in the event of the borrowers on the underlying assets becoming unable to meet their obligations, creditors have the option to enforce the security. However, for an investor who has invested in a CMBS the deflating value of the collateral imply that the ability of the commercial property to generate returns deteriorate.[308] In a wider context the policy objective to resurrect securities markets and diversifying the sources of capital could be compromised as certain segments, including CMBS transactions, are particularly susceptible to environmental and climate exposures due to the environmental and climate risks associated with the underlying assets and borrowers.

In addition, as lenders often require the commercial property to be adequately insured, notable environmental and climate exposures could result in the initial borrower being in breach of its obligations under the underlying loan agreement if an insurance company refused to insure or reinsure the property.[309] This would also contradict the very idea of a collateral facilitating better access to capital, as well as deteriorate the quality of the underlying assets in a CMBS transaction.[310] Similarly, due to the unpredictable nature of

[304] ibid.
[305] C Lafakis et al, 'The Economic Implications of Climate Change' (Analysis, Moody's June 2019) <www.moodysanalytics.com/-/media/article/2019/economic-implications-of-climate-change.pdf> accessed 10 June 2021.
[306] ibid 4.
[307] ibid.
[308] V Finch, *Corporate Insolvency Law* (2nd edn CUP, 2009), 74 and 88.
[309] Wood (n 84) 328
[310] Finch, *Corporate Insolvency Law* (n 308) 93.

environmental and climate risks, an event of default affecting returns and even the enforcement of the security on the original commercial property mortgage may be triggered if the initial borrower fails to comply with value maintenance clause.[311] This means that if the value of the commercial property falls below pre-determined level, the lender may demand a top-up security from the original borrower.[312] Hence, credit risk could materialise at the level of the loan if, for example, an event of default is triggered or the granting of the additional security right is later on deemed to have been an agreement to prefer. Such could contribute towards the original loan allocated in a CMBS pool becoming a non-performing one.[313]

At this point the discussion shall be shortly reversed to sustainability-linked loans and green real estate debt finance which are concerned either with improving the overall sustainability profile of the borrower or providing funding for *per se* green construction and retrofit projects. They differ slightly from the discussion relating to physical and transition risks because the incentive to comply with SPTs is based on margin adjustments rather than the triggering of an event of default. Nevertheless, analogies between sustainability-linked loans and especially environmental and climate transition risks could be identified.

A concrete example of this is the Renovation Wave introduced under the European Green Deal.[314] As the revisions will concern inter alia the energy performance of buildings, the initial borrowers on the securitised commercial real estate loans may be increasingly encouraged to seek the incorporation of clauses bearing relevance in terms of environmental and climate sustainability profile into the agreement. However, because the loan-level analysis conducted by CRAs in relation to CMBS is primarily focused on elements such as default, hedging, enforcement and maturity, it is unlikely that such adjustments used to align the debt facilities with sustainability KPIs will have any significant direct impact on the credit rating of a CMBS. This is because changes in margins tend to be relatively minor given that the level of profit yielded by a bank as a lender will also decrease if the original borrower successfully meets the agreed SPTs.

Nevertheless, if the SPTs attach for instance to provisions that aim to enhance energy efficiency of a commercial property, in the long run these incentives may have a positive

---

[311] Wood (n 84) 328.
[312] ibid.
[313] ibid.
[314] Commission, ‘A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives’ (Communication) COM(2020) 662 final.

impact on the credit rating of a CMBS as well. This is because the borrower may be able to utilise *inter alia* new technology to target user behaviour, a perspective generally escaping the scope of rating methodology and modelling. Nonetheless, as noted by *Kempeneer et al*, user behaviour is linked to environmental optimisation in buildings, providing an ample opportunity consider human behaviour also in financial terms.[315]

The decision-making process of a person is inherently flawed with various cognitive limitations, meaning that whilst people would generally prefer acting sustainably, they may still opt out from doing so.[316] In the context of commercial properties this could mean that the customers visiting the property may be shirking from their assumed duty to act sustainably as they generally escape the consequences deriving from such actions. In other words, for example non-beneficial tax treatment does not immediately affect the users of the property, thus giving rise to an agency problem of sorts.[317] However, this issue could be addressed through regulation; regulation is capable of setting goals that are sought after expressly or alternatively, regulation can align attitudes and behaviour with the goals it seeks to achieve.[318] Similar premise applies to other forms of control, including soft law instruments. In this sense it is arguable that the original borrowers in CMBSs can be financially incentivised to utilise for instance new technologies and smart real estate design with a view of modifying the behaviours of the property users which might successively reduce costs associated with running the property and thus, enhance creditworthiness.

4.4.1. Regulating environmental and climate exposures

The following discussion shall assess how legally binding instruments applying to credit rating agencies and CMBSs take into account considerations presented in the preceding paragraphs. In relation to CRAs, of interest are especially provisions covering methodology and other analytical tools used to determine credit risk. Under CRA Regulation I, credit rating agencies are obliged to disclose methodologies, models and key rating assumptions used in ratings.[319] The methodologies should be rigorous, systematic, continuous and validated, as well as subjected to ongoing review to reflect any material changes affecting

[315] S Kempeneer et al, 'Bringing the User Back in the Building: An Analysis of ESG in Real Estate and a Behavioral Framework to Guide Future Research' (2021) 13(6) Sustainability 1, 4–5.
[316] ibid.
[317] O Weber et al, 'Incorporating Sustainability Criteria into Credit Risk Management' (2010) 19 Bus Strat Env 39, 47.
[318] K Bilz and J Nadler, *Law, Moral Attitudes, and Behavioural Change* in E Zamir and D Teichman (eds), *The Oxford Handbook of Behavioural Economics and the Law* (OUP 2014), 241.
[319] Consolidated version of the CRA Regulation (n 56) arts 8(1) and 8(2a).

ratings assigned.[320] In addition, CRAs are expected to put in place internal mechanisms that enable them to monitor the impact of changes in macro-economic context and market conditions on credit ratings.[321] However, currently it is not possible to go further than this because ESMA, European Commission and public authorities of EU Member States are prohibited from interfering with the actual content of ratings and methodologies.[322]

To begin with, rules relating to the process underlying the assignment of credit rating may be criticised. If credit ratings are first and foremost opinions on credit quality, the ability of ESMA to determine whether the methodology has been used in a manner described in legislation when the analysis in inherently based on the discretion of a credit analyst is limited and doubtful.[323] As mentioned above, financial sector has traditionally failed to account for sustainability sufficiently and in light of this, it is arguable that environmental and climate considerations may not be currently considered to the extent and detail necessary in the absence of any express provisions obliging CRAs to integrate ESG into credit ratings. Second, compulsory revision of a credit rating does not *per se* address the embedded problems especially with regards rating accuracy because "proactive ratings could be as wrong as unrevised ratings".[324] The issue is related to the manner in which rating agencies apply methodology when reviewing and amending ratings, giving rise to doubts that they may be failing consider relevant environmental and climate risks that may arise only after some time. Indeed, ESMA has found that CRAs have failed to apply loan-level information and models systematically, preventing them from projecting expected losses and cash flows in an accurate manner.[325] Further, it is possible that CRAs may only review and update the already assigned ratings with a view of demonstrating compliance with regulatory provisions rather than in pursuance of exercising any substantive judgement when doing so.[326] This could render the obligation to review and appropriately update credit ratings a tick the box exercise.

These issues affecting rating accuracy is particularly worrying because the content of environmental and climate factors is not yet fully standardised or even fully defined in legal

[320] ibid.
[321] ibid arts 8(3) and 8(5).
[322] ibid art 23.
[323] ibid art 8(3); I Chiu, 'Regulatory Governance of Credit Rating Agencies in the EU: The Perils of Pursuing the Holy Grail of Rating Accuracy' (2013) 4 Eur J Risk Reg 209, 221.
[324] ibid.
[325] ESMA, 'Credit Rating Agencies: ESMA's investigation into structured finance ratings' (n 110) 4; although the review focused on RMBSs, ESMA states that the findings and considerations are of general nature and applicable to a variety of issue ratings.
[326] Chiu, 'Regulatory Governance of Credit Rating Agencies in the EU (n 323).

terms. This could prove particularly harmful if the investor or the issuer sought to make a claim against a CRA for materially misleading ratings. The rights of investors could be even further compromised in light of the finding that the data against which CRAs apply methodologies is often suboptimal and unverified.[327] Whilst is might be paradoxical to require CRAs to include environmental and climate considerations into credit ratings more robustly whilst uncertainty still defines at least some aspects of environmental and climate risks in the legislative context, it is also arguable that CRAs should be able to form a relatively comprehensive understanding of the relevant and material risks given their existing practices and the constantly developing binding regulatory regime relating to ESG complementing the existing market practice. Moreover, as the regulatory ecology covering ESG in EU evolves rapidly, it is arguable that environmental and climate considerations could be embedded in other already established risk categories considered in the process of credit rating, for example regulatory risks.

The above considerations link the responsibility of CRAs to the duty of investors to conduct due diligence. An early landmark decision in the field of international securities law is the case of *Escott v BarChris Construction Corporation* which emphasises the importance of thorough due diligence in respect of structured finance especially where the materiality of misstatements made by a gatekeeper is disputable.[328] At a legislative level, the deficiencies relating to due diligence became expressly addressed when the Securitisation Regulation was introduced. In this regard articles 5, 6 and 7 of the said Regulation are of importance. These articles apply to institutional investors which generally refers to a heterogenous group of institutions such as banks, pension funds, mutual funds, hedge funds, sovereign welfare funds and insurance companies.[329]

The purpose of these articles of the Securitisation Regulation is to ensure that an investor has properly assessed the risks arising from securitisation and from the securities even if CRAs have failed to do so.[330] The due diligence checks shall cover at least the assessment of risks relating to securitisation position, underlying exposures and structural features of the transaction, including those described in Part 3 of this paper. In terms of CMBSs, assessment of environmental and climate risks can be understood to fall within the scope of this more

[327] ibid.
[328] *Escott v Bar Chris Construction Corporation* [1968] 283 F Supp 643 (US).
[329] E Rock, 'Institutional Investors in Corporate Governance' (2014) University of Pennsylvania Law School, Institute for Law and Economics Research Paper No 14-37, 10.
[330] ibid.

general provision.[331] From a point of view of an institutional investor, the provisions are important particularly because in EU these entities are "expected to enhance long-term value creation in the real economy".[332] Hence, a duty to exercise due diligence can be connected to a wider objective relating to financial stability. This is arguably of emphasised importance in the context of CMBSs as commercial real estate investment market is a segment dominated by banks, subject to volatility and prone to sustainability exposures particularly in terms of environment and climate.[333]

Whilst recital 2 of the Securitisation Regulation makes a reference to the ambition of the Commission to support employment and sustainable growth. To this effect, the Regulation introduces STS criteria aiming to promote sustainability in capital markets. A STS securitisation refers to a transaction which meets the defined requirements relating to simplicity, standardisation and transparency.[334] Whilst the first two elements are primarily concerned with the governance dimension of ESG, the transparency element broadens the notion of sustainability to include environmental and climate considerations.[335] Nonetheless, the primary issue is that the sustainability considerations deriving from STS criteria – including environmental and climate matters – do not apply to CMBS transactions.[336]

Initially, article 10(3a) of the Committee on Economic and Monetary Affairs Report introducing the proposal to implement the standard of simple, transparent and standardised securitisation outlined that an originator and a sponsor of structured product should publish "*information on the long-term, sustainable nature of the securitisation for the investors, using environmental, social and governance criteria to describe how the securitisation in question contributed to real economy investments and in which way the original lender used the freed-up capital*".[337] Provisions to this effect were subsequently incorporated into the

331 Securitisation Regulation (n 128) arts 5(3)(a) and (b).
332 C Amariei, 'Fostering Institutional Investment in Europe's Capital Markets: Reality vs. Expectations' (2nd Interim Report of the CEPS-ECMI Task Force on Asset Allocation in Europe, 14 June 2018); Securitisation Regulation (n 128) recital 9.
333 P Eichholtz et al, *Real Estate, Governance, and the Global Economic Crisis* in J Hawley et al (eds), *Corporate Governance Failures: The Role of Institutional Investors in the Global Financial Crisis* (University of Pennsylvania Press 2011).
334 Securitisation Regulation (n 128) arts 18–22 and 23–26.
335 T Juutilainen, *EU Securitisation Regulation: legal ordering in symbiosis with transnational bodies* in M Gamito and H Micklitz, *The Role of the EU Transnational Legal Ordering: Standards, Contracts and Codes* (Edward Elgar 2020), 193.
336 Securitisation Regulation (n 128) recital 29.
337 Committee on Economic and Monetary Affairs, 'Report on the proposal for a regulation of the European Parliament and of the Council laying down common rules on securitisation and creating a European framework for simple, transparent and standardised securitisation and amending Directives 2009/65/EC, 2009/138/EC, 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012' COM(2015) 0472, art 10(3a).

Securitisation Regulation. Although the relevant articles with an express environmental and climate risk mandate currently apply only to STS securitisations in which the underlying asset pools comprise of residential loans or auto loans or leases, article 46 includes an option to extend the scope of it. However, this does not benefit CMBSs because as stated, they are not eligible for STS label in the first place.[338]

As a starting point for *de lege feranda* analysis, it should be noted that the ESAs and Commission have been instructed to engage in reviewing the Securitisation Regulation.[339] In a recent report on the implementation and functioning of the said instrument the supervising bodies underlined that the purposively restrictive STS label excludes *de facto* a significant number of transactions occurring in the EU securities market, including CMBS transactions which together with collateralised loan obligations held a combined market share of 20 per cent in 2019.[340] Further, the Securitisation Regulation was recently amended, resulting in the inclusion of synthetic on-balance sheet securitisations to the STS regime regardless of their previous exclusion from the scope of it.[341] The developments could indicate that CMBS could at some point in the future be able to obtain a STS label or similar and thus, the legal and institutional support with respect the inclusion of environmental and climate considerations could take more systematic, harmonious and transparent form. This would also avoid any interference with the methodologies used by CRAs as considerations relating to environmental and climate exposures would be considered at an earlier stage.[342]

4.5. Social dimension

A persisting challenge relating to the social dimension of ESG in credit ratings relates to the difficulty in quantifying such risks and thus, applying them into ratings. Further, unlike environmental and governance matters, social issues are arguably lacking the necessary institutional support even to a greater extent. A further dilemma relating to the social dimension is its close association particularly with corporate governance, but also with environmental and climate considerations, thus making it challenging to attribute the

---

[338] Securitisation Regulation (n 128) recital 29.
[339] ibid recital 21 and arts 31, 44 and 46.
[340] ESAs, 'Joint Committee Report on the implementation and functioning of the Securitisation Regulation (Article 44)' (17 May 2021) <www.esma.europa.eu/sites/default/files/library/jc_2021_31_jc_report_on_the_implementation_and_functioning_of_the_securitisation_regulation_1.pdf> accessed 1 August 2021.
[341] Parliament and Council Regulation (EU) 2021/557 of 31 March 2021 amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 crisis [2021] OJ L 116/1.
[342] CRA Regulation I (n 56) recital 23 and art 23.

dimension an intrinsic value.[343] That being said, whilst in a wider perspective social sustainability is a slowly developing area, exposures with a linkage to social sustainability have still been recognised to affect credit risk by CRAs.[344]

The EU Action Plan suggests that social considerations could include themes such as equality, inclusiveness and employee and community relations.[345] The traditional approach to social matters has indeed been the examination of the impact which commercial organisations have on their stakeholders.[346] In the context of credit ratings of CMBSs, relevant social issues relate to both internal and external factors and include matters such as demographic trends, consumer preferences and management of resources.[347] Hence, one way of understanding the relationship between social sustainability and credit ratings is to assess the resilience of the structured product towards socially disruptive trends and occurrences.[348]

There exists a clear nexus between a CMBS transaction and social exposures where the underlying asset portfolio serves a social purpose or socially sustainable economic activity by its definition. Such objectives attaching to the use of proceeds could include the construction of a multi-family housing complexes, housing for disadvantaged groups or provision of affordable housing.[349] However, if such properties are subsequently converted into assets that are likely to generate higher returns is the form of cash flows – for instance as the occupants tend to have stronger socio-economic statuses than those who are eligible for socially sustainable housing, or because business organisations are often considered more solvent than private individuals – but simultaneously compromise the social objectives attaching to the property, the impact on credit quality might be positive whilst the resulting

[343] Commission, 'Draft Report by Subgroup 4: Social Taxonomy' (Platform on Sustainable Finance, July 2021) <https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/sf-draft-report-social-taxonomy-july2021_en.pdf> accessed 14 July 2021, 8.

[344] 'ESG in Credit' (White Paper, Fitch Ratings 2020) <https://your.fitch.group/rs/732-CKH767/images/Fitch%20Ratings%20-%20ESG%20In%20Credit%202020.pdf?mkt_tok=eyJpIjoiT0dJd09UVTBNbVV3TXpObCIsInQiOiJCNlBlaFdaYjg4M1hTRzVQZHFyRmZiRzE4a1JibW9VdVwveHE4SWpHNWQ2YzJEVU1BdWEzdmdxR1wvUkhMOWhkT1dpYXJzbkVJenJpTVNFKytLOVh1cHljMGFUYjg1Wmp5a0dVamFrOWxjT0xYWTd0RDlFUUdvS3Z3Zmxhck5TVHJlUndSK21TSXpQczVRbmIyZ21xTVM3QT09In0%3D> accessed 12 July 2021.

[345] Commission, Action Plan (n 4) 2; T Bosteels and P Sweatman, 'Sustainable real estate investment: Implementing the Paris Climate Agreement: An Action Framework' (UNEP FI, February 2016) <www.unepfi.org/fileadmin/documents/SustainableRealEstateInvestment.pdf > accessed 12 July 2021, 10.

[346] Marco Sindaco, 'The Evolution of ESG Factors in Credit Risk Assessment: Social Issues' (*S&P Global*, 31 March 2021) <www.spglobal.com/marketintelligence/en/news-insights/blog/the-evolution-of-esg-factors-in-credit-risk-assessment-social-issues> accessed 11 July 2021.

[347] ibid; UNPRI, 'UN Principles for Responsible Investment' (n 209) 35–36.

[348] ibid.

[349] Fitch Ratings, 'ESG in Credit' (n 344) 34–35.

social effects are negative.[350] This paradoxicality reflects the quantitative challenges relating to social considerations especially in structured products.

In view of more general exposures deriving from the social dimension of ESG, inter alia Moody's acknowledges that social trends, including demographic changes, affect the credit quality of CMBSs.[351] These considerations may be classified as exposures to certain social phenomena, reflecting for example structural shifts in consumer preferences. In this sense social exposures should be relatively uncomplicated to take into consideration because they often affect especially cash flows directly; and because cash flow volatility forms a part of creditworthiness assessment in the context of CMBSs, fluctuations caused by phenomena such as global pandemics and rapidly evolving consumer preferences affect the productivity of land.

However, it is less straightforward to develop methodology and modelling that enables the assessment of such elements comprehensively given that the relevant and material social exposures may often be unpredictable and unforeseen. In addition, they may be secondary in a sense that social risks often derive from wider macroeconomic phenomena. For example, it is arguable that the extensive closures of, amongst others, shopping centres and the resulting flood of waivers for rents and bans on enforcement action in response to the covid-19 pandemic emerged unanticipated. Similarly, future health crises may impact the preferences of people, emptying previously densely populated metropolitan areas and making redundant some commercial real estate by driving down the demand for it.[352] In addition, megatrends such as digitalisation and transition to platform economy will affect the productivity of retail assets and the demand may be further decreased as the transition to sustainable circular economy proceeds. With regards CMBSs this could result in more general deterioration of credit quality because for instance the likelihood of re-letting premises decrease across the economy. In other words, because the effect of social exposures on the whole of a society and the economy is extensive, the exposures do not attach to an individual obligor but to a wide range of market participants.

---

[350] DBRS Morningstar (n 295) 12.

[351] On the impact of covid-19 to commercial real estate, see e.g. V Gujral et al, 'Commercial real estate must do more than merely adapt to coronavirus' (McKinsey & Company 9 April 2020) <www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/commercial-real-estate-must-do-more-than-merely-adapt-to-coronavirus> accessed 15 July 2021.

[352] ibid.

As per S&P, high interest rates and affordability issues could also give rise to legal and regulatory risks that should be accounted for in ratings and which can be classified as social sustainability exposures.[353] At a loan level, if interest rates are floating or adjustable and they have not been capped or the impact of fluctuations not mitigated for example by way of hedging, this could give rise to a set of risks linked to social sustainability especially if the original borrower enters financial distress since interest rates are recognised to reflect the credit risk assumed by the creditor when providing financing to a certain borrower.[354]

At a more theoretical level, the rise of new capitalism has meant that the relationship between a debtor and a creditor is no longer a bilateral one.[355] This means that instead of focusing on nurturing the borrower back to health, the focus may be on ways in which the wealth of creditors is maximised in an event of default.[356] This could be in preference to exercising influence over, for instance, the corporate governance practices that have given rise to the inefficiencies reflected in the cost of debt, thus departing from any communitarian and social contract approaches.[357] Therefore, the cumulative effects deriving from financial distress connected to, for example, interest rate adjustments are not strictly limited to the confines of credit risk assumed by the immediate parties to the transaction, but have a nexus with wider considerations, such as systematic risk and financial stability.

Given the relative legal ambiguity attaching to social sustainability, it is possible to argue that the different elements constituting this dimension of ESG should be primarily targeted through special legislation, such as insolvency, tax, employment, property and land laws rather than attempting to infiltrate the notion of social sustainability into the regimes applying to credit rating agencies and securitisation. Indeed, it is arguable that parties to the transaction would be overall better protected through entitlements granted in separate legal regimes, allowing more circumstantial legal definitions being established and also the inclusion of desired social policy objectives.[358] Consequently, social sustainability in the rating of CMBSs should be approached from a wider macroeconomic perspective, i.e. promoting the creation of sustainable capital and securitisation markets.

---

[353] 'European CMBS Methodology and Assumptions' (Criteria, S&P Ratings Services 7 November 2021) <www.maalot.co.il/Publications/MT20150111122815.pdf> accessed 5 June 2021, 5.
[354] Gullifer and Payne (n 10) para 2.3.1.2.
[355] Finch, *Corporate Insolvency Law* (n 308) 271–272.
[356] Finch, 'Corporate Rescue in a World of Debt' (n 12).
[357] Commission, Recommendation No 2014/135/EU of 12.3.2014 on a new approach to business failure and insolvency' COM (2014) OJ L 74, recital 1.
[358] F Kiesel and F Lücke, 'ESG in credit ratings and the impact on financial markets' (2019) 28(3) Financ Mark Inst Instrum 263, 265.

The only express and legally binding provision concerned with social sustainability can be found from article 4 of the Securitisation Regulation which rather surprisingly applies to all securitisations given that precedents speaks against any express provisions concerning ESG in CMBSs. In accordance with the said article, SSPEs must not be established in third countries that are classified as high-risk and non-cooperative jurisdictions by the Financial Action Task Force (FATF), an intergovernmental body established in response to the initiative of G7 countries with a view of targeting money laundering and terrorist financing.[359] Similar prohibition applies to third countries which have not entered into an agreement with an EU Member State to ensure that the third country acts in compliance with article 26 of the OECD Model Tax Convention on Income and on Capital, or the OECD Model Agreement on the Exchange of Information on Tax Matters whilst also ensuring that exchange of information on taxation matters takes place also in practice.[360] As legal risks are paramount considerations in the rating of a CMBS transaction, whether or not the SSPE has been incorporated in accordance with the relevant legislative provisions will affect transactional risks and consequently, a CRA has to consider them as part of the rating process. This in turn reinforces the argument that social sustainability should be target primarily through specific legislative instruments which would in turn be accounted for in credit ratings of CMBS.

It is finally worth noting that as mentioned above, one of the primary objectives of the CRA Regulation and Securitisation Regulation is to promote financial stability and investor protection. These are inherent considerations in relation to social sustainability because especially market failures could have adverse effect on societies and economies at a micro level; vice versa, incorporating material and relevant social considerations into credit ratings could enhance wider prosperity and align especially time horizons of capital markets – conventionally concerned with short term allocation of capital – and the notion of ESG that tends to bear relevance in the long term. Given the role of CRAs in private public governance, it is arguable that the institutions should bear responsibility for promoting such objectives also in the ratings of CMBSs. Whilst the idea fails to provide a standardised and systematic approach to the rating of ESG credit risk in terms of social sustainability, it implicitly mandates CRAs to actively increase the degree of integration of social sustainability into the credit rating market.

[359] Securitisation Regulation (n 128) art 4(a).
[360] ibid art 4(b).

4.6. Governance dimension

Environmental and social aspects of ESG are often concerned with the underlying loan pool and the commercial properties serving as collaterals. However, the governance dimension of ESG in a CMBS transaction tends to relate to transaction counterparties, structure of the transaction and other governance matters relating inter alia to the borrowers on the original commercial real estate mortgages. CRAs can often take these exposures into account as part of analysis relating to rule of law and institutional and regulatory quality, transaction and collateral structure, transaction properties and operational risk and finally, data transparency and privacy.[361] Given the multiple parties involved in securitisation transactions and the complexity of the said structured product, governance risks have in fact for some time been part of CMBS credit ratings.[362] However, the dimension also bears relevance in macroeconomic context and especially in relation to the idea of re-designing and re-engineering of the financial system and capital markets.[363]

Corporate governance is concerned with measures that assure suppliers of finance that they will be getting a return on their investments.[364] If dissected, governance refers to a web of control mechanisms which address the manner in which control and power is exercised in a commercial organisation.[365] In accordance with the foundational theories of corporate governance, these control mechanisms are essential in order to address agency problems which culminate in the separation of ownership and control.[366] This means that an entity is managed by non-shareholder insiders whose interests are likely to differ fundamentally from those of residual owners.[367] The need for safeguards exists because a shareholder has assumed a risk of default by acquiring a stake in the entity and thus, in the role of a residual owner is in danger of losing her investment in the event of financial distress of the entity. Indeed, shareholders will only receive what is left after better ranking claims have been satisfied in a winding-up.

---

361 ibid 12; Fitch Ratings, 'ESG in Credit' (n 344) 35.

362 'How Management & Governance Risks and Opportunities Factor into Global Corporate Ratings' (S&P Global Ratings 7 November 2018) <www.spglobal.com/_Assets/documents/How-Management-Governance-Risks-Opportunities-Factor-Into-Global-Corporate-Ratings-Nov-7-2018.pdf> accessed 18 July 2021.

363 D Munoz, 'In praise of small things: securitization and governance structure' (2010) 5(4) Cap Mark Law J 363, 369.

364 A Shleifer and R Vishny, 'A Survey of Corporate Governance' (1997) 52(2) J Finance 737, 737–738 and 769; R La Porta et al, 'Investor protection and corporate governance' (2008) 58(1) JFE 3, 5.

365 Shleifer and Vishny (n364) 737–738; M Blair, *Ownership and Control: Rethinking Corporate Governance for the Twenty-first Century* (Brookings Institute 1995), 19.

366 Berle A and Means G, *The Modern Corporation and Private Property* (Macmillan 1932).

367 M Jensen and W Meckling, 'Theory of the firm: Managerial behaviour, agency costs and ownership structure' (1976) 3 J Financ Econ 305, 330.

According to *La Porta et al*, corporate governance is a system through which it is possible to protect external investors from opportunistic behaviour of insiders.[368] Consequently, good corporate governance which includes sufficient safeguards protecting the interests of investors may affect firm value positively.[369] In light of this it is arguable that the three predominant objectives of good governance are the optimisation of the use of limited resources; promotion of accountability; and enhancing stewardship with a view of promoting investment, financial stability and business integrity in long term.[370] Therefore, it is unsurprising that much attention has been paid to the nexus between equity and corporate governance.[371]

In comparison to a shareholder, in the context of this paper the role of debt in governance is linked to an investor in a debt instrument and a CRA evaluating the impact of governance practices on future cash flows. Therefore, an investor in a debt obligation does not hold a stake similar to that acquired by a shareholder in any of the entities involved in a securitisation transaction. However, as debt is not a stabile concept but rather responsive to developments occurring inter alia in capital markets, the form of capital could be linked to governance considerations similar to those relating to shareholders.[372] Still, as mentioned earlier in this paper, whilst holders of debt instruments could arguably benefit from good corporate governance especially at the level of original borrowers in a CMBS, the development is to an extent constrained by fragmented capital markets.

This means that as market participants have the option to manage credit risks by reallocating it through securitisation, they may not hold sufficient incentives to engage extensive measures that aim to reinforce good corporate governance. Therefore, the premise that a bank as a major lender to a business organisation could influence the corporate governance practices of the borrower on the basis of bilateral agreement may be less persuasive, because in a securitisation transaction the powers of creditors are dispersed and opportunities to renegotiate with the lender are restricted.[373]

---

368 La Porta et al (n 364) 6–12 and 24.
369 ibid.
370 OECD, *G20/OECD Principles of Corporate Governance* (OECD Publishing 2015), 7.
371 A Pritchard, *Corporate Governance, Capital Markets, and Securities Law* in J Gordon and WG Ringe (eds), *The Oxford Handbook of Corporate Law and Governance* (OUP 2015), para 1; C Whitehead, *Debt and Corporate Governance* in J Gordon and WG Ringe (eds), *The Oxford Handbook of Corporate Law and Governance* (OUP 2015), 472.
372 ibid.
373 Shleifer and Vishny (n 364) 764.

Somewhat inconsistently, investors in CMBSs may neither have the incentives or resources to ensure that the standard of good corporate governance is met at the transaction and borrower levels.[374] However, unless considerations relating to governance are appropriately addressed, managed and identified in the field of structured debt finance, interests between different parties could become severely misaligned and result in grave macro-level knock-on effects which would first bring market functions such as pricing efficiency and liquidity to a halt and eventually, cause the financial system to collapse.[375] Remedying this would require yet another round of "substantial and wholly unprecedented public policy action…[being] taken in the form of state injections of equity and takeover of failed institutions, exceptional liquidity support arrangements and materially tougher capital requirements."[376]

Therefore, a rating agency is entrusted with a central role in this type of risk management.[377] As CRAs should monitor the position of the transaction on ongoing basis from the initial rating to the financial instrument reaching its maturity particularly from the governance point of view, the consequent effect on the specific dimension of ESG is, according to *Munoz*, twofold.[378] To begin with, transaction parties may notify the rating agency about a new factor affecting the rating after which the CRA may adjust the rating accordingly.[379] Furthermore, parties to the CMBS transaction may seek an advance opinion of the rating agency as to whether restructuring or an amendment to the transaction will affect the rating assigned to the issue.[380] The position of CRAs in relation to considering governance risks relating to the CMBS transaction also address the fact that it is not necessary for investors to access all information regarding the transaction and the issue to properly evaluate the appropriateness of price and risk associated with the structured product, but that it should be left to better

---

374 Pritchard (n 371) 472–473.
375 C Kumpan, 'Conflicts of Interest in Securitisation: Adjusting Incentives' (2009) 9 J Corp L Stud 261, 262 and 269.
376 D Walker, 'A Review of Corporate Governance in Banks and Financial Institutions: Final Recommendations' (Walker Review) (26 November 2009) <https://webarchive.nationalarchives.gov.uk/+/www.hm-treasury.gov.uk/d/walker_review_261109.pdf> accessed 16 July 2021, 9; see also e.g. The HLEG, 'Financial Supervision in the EU' (The de Larosière Group Report) (25 February 2009) <https://ec.europa.eu/economy_finance/publications/pages/publication14527_en.pdf> accessed 16 July 2021; Bank for International Settlements (BIS), 'Credit Risk Transfer: Developments from 2005 to 2007' (Basel Committee on Banking Supervision, July 2008) <www.bis.org/publ/joint21.pdf> accessed 16 July 2021.
377 Munoz (n 363) 371.
378 ibid.
379 ibid.
380 ibid.

equipped external parties to do so.[381] In practice it is doubtful how well CRAs have managed to reflect such changes relating to the governance dimension given that ESMA has found that the institutions have failed to review all key elements that are included in the methodologies published by them in accordance with article 8 of the CRA Regulation.[382]

Complexity, transparency and credit ratings assigned to CMBSs are the three dominant sentiments that arguably underlie the governance dimension of ESG throughout a CMBS transaction.[383] Starting with complexity, amongst the key sources of it is credit enhancement mechanism which in the context of CMBSs means tranching, but includes also other important structural features such as subordination.[384] In CMBSs, assessing the loss side of the transaction alone – or in other words, the allocation or distribution of loss deriving from the underlying asset pool by utilising different structural features – may alone be insufficient. Hence, the analysis should include the modelling of cash flow distribution to the tranches in different scenarios.[385] The allocation of payments and risks deriving from the underlying asset pool depends on the structural design of the transaction as determined in, for example, covenants included in the transaction documentation and covering the principles which should be followed when allocating cash flows to different tranches of a CMBS.[386]

Therefore, in addition to the actual credit risk that an investor assumes, there also exists a set of non-default risks that derive from the structural design founded on contractual arrangements.[387] For instance, *Fender* and *Mitchell* note that the end-investor may not be able to obtain sufficient understanding about the actual risk and return profile of the product due to structural complexity which in turn results in greater reliance on credit ratings and omissions with regards investor due diligence.[388] The adversity may further accumulate if CRAs fail to model risks accurately when first assigning a rating to a CMBS and consecutively when reviewing it.[389] Therefore, placing an increased burden on an investor to conduct due diligence may not be completely feasible, because "the complexity of the deal does not often act as a deterrent to investors, but rather as a magnet" especially if the

[381] H von Reden, 'Regulation of securitised products post the financial crisis' (2013) 2(1) UCL JL and J 112, 126.
[382] ESMA, ESMA's investigation into structured finance ratings (n 110) 16.
[383] I Fender and J Mitchell, 'The future of securitisation: How to align incentives?' (September 2009) BIS Quarterly Review <www.bis.org/publ/qtrpdf/r_qt0506f.pdf> accessed 20 June 2021, 32 – 34.
[384] ibid 32.
[385] I Fender and J Mitchell, 'Structured finance: complexity, risk and the use of ratings' (June 2005) BIS Quarterly Review <www.bis.org/publ/qtrpdf/r_qt0506f.pdf> accessed 20 June 2021, 71 – 72.
[386] ibid.
[387] ibid 72.
[388] ibid.
[389] ibid 77.

rating of the structured product is unduly inflated, thus giving the structured product an appearance of an ideal investment especially where such an appearance is supported by a credit rating.[390] Furthermore, the efficient market hypothesis relying on the investor acquiring all necessary information on the transaction has been repeatedly discredited.[391]

Transactional complexity is linked to transparency and the latter is inherently connected to agency theory. Because structured finance employs several parties with conflicting interests, the consequences may relate to the emergence of adverse selection and moral hazard.[392] Opaqueness occurring at different stages of the transaction also emphasises the problem of information asymmetry between parties to the transaction. As investors generally neither has access to detailed loan-level information nor the resources the monitor the relevant parties, reliance on credit rating agencies may increase also in this regard. Simultaneously, the inventive of the issuer to engage in monitoring may have decreased because credit risk has shifted to investors.[393] These challenges could arguably be remedied only if sufficient discipline throughout the transaction chain was upheld and information flew freely.[394] Clearly this is not always the case since rating agencies assess transparency as part of transaction data and reporting when considering the potential credit risks.

Furthermore, in CMBS transactions some of the most fundamental governance considerations relate to the SSPE. In this regard, the focus is often on the independence of the SSPE and the future or contingent events which could affect its solvency.[395] The assessment may rely on legal opinions issued by local legal counsels and addressing the fundamental legal aspects of the transaction. In more concrete terms, the relevant considerations could include the bankruptcy-remoteness of the SSPE, the method of assignment used to transfer the underlying assets or credit risk as well as parallel considerations that do not necessarily directly relate to the SSPE as an entity, but which are important in terms of legal titles to the underlying collaterals and the validity and enforceability of obligations under the finance documents of the portfolio loans. Whilst CRAs do not review legal opinions as such, as part of rating CMBS transactions for example

[390] Munoz (n 363) 370.
[391] ibid.
[392] ibid; P Klein et al, 'Transparency as a remedy for agency problems in securitization? The case of ECB's loan-level reporting initiative' (2021) 46 J Financ Intermed 1000853, 1000853.
[393] ibid; Kumpan (n 375) 271.
[394] Fender and Mitchell, 'The future of securitisation' (n 384) 28.
[395] 'DBRS Morningstar Criteria: Approach to Environmental, Social and Governance Risk Factors in Credit Ratings' (DBRS Morningstar February 2021) <www.dbrsmorningstar.com/research/373262/dbrs-morningstar-criteria-approach-to-environmental-social-and-governance-risk-factors-in-credit-ratings> accessed 1 August 2021, 7–8.

Fitch considers these matters in connection with assessments of rule of law and institutional and regulatory quality.[396]

A passive SSPE is at least in theory the conclusive decision-maker in a CMBS transaction.[397] Nevertheless, it has been stated that strategic decision-making power remains with the originator.[398] In accordance with the common principles of the law of business organisations, the SSPE still has to have the vital corporate bodies, referring primarily to a board of directors. Consequently, an account of the "allegiances, loyalties and fiduciary duties" of the directors of a SSPE may prove useful from the perspective of exposures deriving from the governance of these entities.[399]

Generally speaking, board of directors owes fiduciary duties to the shareholders of a business entity as the board is acting on behalf of the residual owners in circumstances that give rise to a relationship that is inherently dependant on trust and confidence. In other words, the board should have its nose in and fingers out as it aims to ensure that the entity is run with its best interest in mind. Nevertheless, because in the context of SSPEs shareholding is immaterial for the reason that the entity is effectively a shell company and the capital structure of it is made up of the debt secured by the asset pool assigned to it in connection with the securitisation transaction, in practical terms any fiduciary duties are owed to the investors in CMBSs.[400]

Traditionally, the interests of creditors usually become paramount in the vicinity of insolvency or at the latest when the entity has become unable to pay its debts as they fall due.[401] However, in terms of CMBS transactions having regard to the interest of investors acting as creditors cannot be delayed until the key participant becomes financially distressed. Any proposal to this effect would conflict with the concept of fiduciary duty and especially with duties owed to investors in a debt instrument.

Whilst the theoretical ambiguity could be at least partially bypassed by engaging the nexus of contracts theory and stakeholder theory, a more concrete take on the debate could be found

396 Fitch Ratings, 'ESG in Credit' (n 344) 35.
397 Munoz (n 363) 370.
398 ibid.
399 ibid 377.
400 ibid 377.
401 In the context of financial institutions, a new definition for insolvency was recently introduced. See Parliament and Council Regulation (EU) 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (consolidated version) [2020] OJ L 176/1, art 178.

from assessing company purpose.[402] In the case of CMBS transaction the purpose of a SSPE is clearly the facilitation of securitisation transaction and therefore, the success of the SSPE has to be understood to mean acting in the interest of the investors in CMBSs whilst having regard to the seniority of the claims established by way of tranching.[403] Such corporate objective could and is likely to be reinforced by including it in the articles of association of the SSPE.

Nevertheless, this does not solve the conflicts between investors holding tranches of different seniority. These conflicts are likely to become more severe if CRAs fail to determine model risks accurately; this could consequently results in misjudgements relating to the exposures attaching to each tranche and inaccurate credit ratings.[404] As shown by *Fender* and *Mitchell*, considerations relating to governance may make matters worse in this respect because the holders of lower equity tranches in a CMBS are likely to favour an underlying asset pool carrying more risks in contrast to the holders of more senior tranches who would suffer from any discrepancies that result in the rating indicating that the investment is less risky than it actually is.[405] This would prove to be particularly harmful to financial institutions which are required to comply with prudential regulation and are subject to a prohibition to buy or hold a position in financial instruments that are below investment grade: An inaccurate rating would effectively strip these obligations from their purpose. Additionally, less sophisticated investors lacking the necessary capacity to analyse exposures associated with the structured product accurately would be at risk of assuming unanticipated losses.[406]

Furthermore, in some securitisations an asset or collateral manager is appointed. These parties assume responsibility for either selecting the assets or for administrative powers relating to substitution in the event of prepayment.[407] In these cases it is not always clear to whom duties are owed because the manager could either be a manager of the assets of the investor or the assets of the SSPE.[408] Generally, such a party should act in the interest of investors and therefore, her role is at least to an extent comparable to that of a collective investment manager.[409] Consequently, in addition to the investor conducting due diligence

[402] Jensen and Meckling (n 367); A Keay, 'Stakeholder Theory in Corporate Law: Has it Got What It Takes?' (2010) 9 Rich J Global L & B 249.
[403] Munoz (n 363) 379.
[404] Fender and Mitchell, 'Structured Finance' (n 385) 74 and 77.
[405] ibid 77.
[406] ibid 78.
[407] ibid. In CMBSs, prepayment protections typically apply and an example of such is substitution of the collateral with cash.
[408] Munoz (n 363) 379.
[409] ibid.

and a CRA delivering an opinion on the creditworthiness of the instrument, the manager may also be obliged to disclose material and relevant information on credit risks that often relate to the governance dimension of ESG in a CMBS transaction.[410] This could be seen as a measure capable of relatively efficiently addressing information asymmetries that occur throughout the transaction chain and prevent free flow of information.

Paradoxically, although transactional complexity and information asymmetries should be addressed with a view of accurate credit ratings being assigned to structured products, the quality of ratings has in fact declined.[411] Therefore, the challenges of transaction complexity and opaqueness arguably culminate in credit ratings themselves as investors and regulators continue to rely on them. For instance, the complexity of structured products, including CMBSs, may incentivise CRAs to favour certain issuers especially if the business relationship is a long one due to high transaction costs and the relative difficulty associated with the producing of ratings.[412] The issue may be further aggregated as the model of remuneration applicable to credit rating agencies is that of issuer-pays.

In addition, CRAs are "appointed and remunerated by issuers to provide opinions on the likelihood of the issuer to honour their financial commitments in relation to their investment products" and as mentioned earlier, there is no contractual relationship between the provider of the opinion and the end-user of it.[413] Given that the threshold for establishing liability for misrepresentations in credit ratings under the rules of CRA Regulation III is a high one and in some EU Member State jurisdictions bringing a claim for the purpose of challenging the accuracy of *an opinion* may create a hurdle of its own, the objectivity of CRAs and credit ratings more generally could become affected.[414] The issue might be exacerbated depending on the prevailing economic cycle; during an upturn, ratings may experience inflation due to market pressure which takes the form of decreased number of expected defaults in a wider context.[415] It is arguable that the issue affects especially real estate markets and ultimately CMBSs that are reliant on the sale of the underlying assets and which may therefore be particularly responsive to market sentiments in general.

[410] ibid 380.
[411] F Partnoy, 'Rethinking regulation of credit-rating agencies: an institutional investor perspective' (2010) 25(4) JIBLR 188, 190–191.
[412] Efing and Hau (n 64) 56.
[413] Chiu, 'Regulating Credit Rating Agencies in the EU' (n 52) 273.
[414] ibid.
[415] Efig and Hau (n 64) 56.

4.6.1. A need for further regulation?

Hence, in terms of corporate governance, the wider issues that affect credit ratings of CMBSs relate to complexity, opaqueness and inaccuracies associated with ratings. Consequently, with a view of cementing governance into credit quality assessment, CMBSs might benefit from the STS label. However, as already established, this is not the case.

According to *Solomon* and *McCluskey*, as a result of the 2008 financial crisis, CMBSs are potentially judged or punished on the basis of contagion theory resulting in the exclusion of these instruments from the scope of STS securitisation.[416] In recital 29 of the Securitisation Regulation the limitation is rationalised on the basis that these products rely on the sale of the commercial properties securing the underlying assets which results in vulnerabilities.

Commercial properties are indeed often dependant on the effects deriving from wider economic cycles affecting the prospects of realisation. However, it is possible to argue that CMBSs should not be judged similarly to inter alia RMBSs because the risks attaching to these instruments differ: First, the issuance of RMBSs is based on "a network of brokers with incentives opening the door to several abuse factors".[417] Second, the process of originating securities backed by commercial real estate is often more disciplined and complex process involving substantially bigger underlying loans, thus benefiting from a wider availability of financial data and information on the condition of the assets. Third, the legal documentation utilised in connection with the transaction may already appear in a standardised form and which already in itself reduces the likelihood of abuse. Fourth, and most importantly, market demand for ESG and proliferation of the notion of sustainable real estate make the underlying real assets attractive investment. On these bases it could be argued that the exclusion of CMBSs from the scope of STS securitisation is at least partially unjustified.

If follows that only the general provisions set forth in the Securitisation Regulation apply to CMBSs in terms of governance. However, the relevant articles applicable to all securitisations include relatively a comprehensive transparency requirements which apply equally to originators, sponsors and SSPEs.[418] The transaction parties are required to disclose data on the credit quality and performance of underlying exposures and make available such documentation which is necessary to gain an understand of the nature of the transaction; this

[416] Solomon and McCluskey (n 138) 405–406.
[417] ibid 406.
[418] Securitisation Regulation (n 128) art 7.

includes inter alia a description of payment priorities that are disclosed in the form dictated in the draft technical standards developed by the ESAs.[419] Importantly, investors are subject to due diligence requirements corresponding with those set forth in the CRR.[420]

From a governance perspective, the eligibility of a CMBS to STS label could prove particularly beneficial from the perspective of banks as originators in a CMBS transaction given that the STS criteria are met; the additional requirements introduced via amendments to the CRR are complied with; and appropriate notifications to regulators are filed. This is because the transactions would be eligible to preferential treatment occurring in the form of reduced level of regulatory capital required from banks against securitisation positions, i.e. exposures to securitisations.[421] Importantly, the regulation sets forth relatively extensive regime protecting investors from, for example, clawback provisions.[422] Moreover, it is possible to argue that the interests of investors in different tranches are addressed via provisions found from article 20(11) and 20(12), limiting the use of defaulting or non-performing loans. In addition, the underlying asset pool should meet predetermined, clear and documented eligibility criterion, thus limiting the discretionary powers of a portfolio manager and preventing potential abuses.[423]

With regards the requirement of standardisation, the provision bearing most relevance in light of the above discussion is article 21(10) according to which transaction documentation is required to include clear provisions accommodating timely resolution of conflicts between investors with different seniorities and identifying the fiduciary duties owed to investors by relevant parties and entities. Under the transparency requirements, defined parties are required to publish data on historical and loss performance and disclose the sources from which such information has been retrieved.[424] Article 22 also introduces a verification obligation to which a sample representative of underlying exposures of the securities issuance is subjected to.[425] Further, the originator or an issuer has to provide a precise demonstration of the contractual arrangements regarding any underlying exposures and the payment flows between the originator, sponsor, investor, other third parties and the SSPE.[426]

---

[419] ibid; M Craske, 'Made Simple' (2018) 37 Int'l Fin L Rev 53, 54.
[420] ibid 54.
[421] ibid.
[422] Securitisation Regulation (n 128) arts 20(1), 20(2), 23 and 24.
[423] ibid art 20(7), 23 and 24.
[424] ibid art 22(1), 23 and 24.
[425] ibid art 22(2), 23 and 24.
[426] ibid art 22(3), 23 and 24.

The rationale for these amendments to the securitisation regime from the point of view of credit ratings include three predominant considerations and speak for extending STS securitisation to cover CMBS transactions. First, in more general terms, the changes arguably align the interests of the parties to the transaction by enhancing the safeguards available to investors and by emphasising the duty of investors to exercise due diligence. Hence, the aim seems to be the creation more sustainable securities markets overall. In terms of credit ratings, the provisions targeting complexity of the securitisation transaction by setting forth simpler and more transparent transaction governance regime may have a positive impact on the modelling assumptions used by CRAs and thus affecting the institutions directly.

In addition, it is possible to argue that the relationship between corporate governance and credit ratings is dynamic; for instance, it is implicit in the seminal theory presented by *Jensen* and *Meckling* that poor corporate governance affects credit ratings negatively because opportunistic management practices may affect creditworthiness negatively and therefore, increase the likelihood of default.[427] As one of the issues in CMBS transaction are misaligned interests and information asymmetries, their admittance within the scope of the STS label could therefore prove to be beneficial. In addition, as suggested earlier, the concept of good corporate governance should accommodate the inclusion of social and environmental dimensions. Therefore, the impact of the Securitisation Regulation could be binal: First, it has the potential of promoting good corporate governance practices. Second, it affects CRAs and ratings by enhancing good corporate governance at the transaction level. As a conclusion it is possible to argue that when read together with the CRA Regulations, the regime aims to regulate the products themselves, thus partially departing from traditional approach assumed in financial regulation which has avoided describing how financial instruments should be designed.[428]

Consequently, the role of the CRA Regulations can be assessed from two perspectives. The first approach applies to ratings themselves and to this end, the aim bearing relevance in the context of ESG exposures in CMBSs is the enhancement of rating accuracy. As this perspective has been studied in some detail in connection with environmental and social dimension of ESG, the following discussion shall focus on CRAs and ensuring that ratings

[427] Jensen and Meckling (n 367); C Lin et al, ’The Effects of Corporate Governance on Credit Ratings: The Role of Corporate Social Responsibility’ (2020) 56(5) Emerg Mark Finance Trade 1093, 1095.
[428] Chiu, ‘Regulatory Governance of Credit Rating Agencies in the EU’ (n 323) 217.

"are conducted in accordance with the principles of integrity, transparency, responsibility and good governance."[429]

To this end, the first objective of the CRA Regulations is to reinforce market discipline for credit ratings. In view of this the measures addressing internal governance of credit rating agencies include various rather detailed provisions addressing conflicts of interests. These include obligations and measures relating to organisational and operational requirements, periodical transparency reports, statements of ownership structures, analyst rotation, internal control mechanisms, compliance reports, revenue information as well as transparency obligations requiring CRAs to disclose amongst others their largest clients, policies applying to conflicts of interest, methodologies, catalogue of ancillary services, remuneration structures and codes of conduct implemented.[430] Especially the disclosure-related requirements are often accompanied by provisions set forth in regulatory technical standards.[431]

These provisions matter because they provide legal protection for investors in structured products and especially CMBSs which are, as established above, notoriously complex.[432] The CRA Regulations emphasise *de jure* disclosures and transparency as mechanisms able to ensure good governance practices in terms of CRAs, however, the effectiveness of the measures is questionable. Whilst disclosure and transparency regimes are often justified on the basis of addressing information asymmetries that obstruct the materialisation of certain policy objectives and which should therefore be addressed by regulatory means, these frameworks may prove inefficient unless the information that is disclosed is actually internalised in the decision-making processes of the parties to whose benefit the disclosure and transparency provisions are implemented.[433] In the context of credit ratings, such cementing can primarily occur by way of investors challenging the actions of CRAs through the civil liability regime, however, as noted by *Chiu*, investors are likely to be reluctant to bring claims against CRAs unless substantial losses occur.[434] Relying on the exercise of market discipline in this manner may additionally be discouraged by rational apathy and even free-riding amongst investors. Whilst the test for establishing liability requires the CRA

[429] Chiu, 'Regulating Credit Rating Agencies in the EU' (n 52) 291; CRA Regulation I (n 56) recital 1.
[430] CRA Regulation (consolidated version) (n 56) arts 6, 6(a), 6(b), 11 and 12 and Annex I, Sections A and E.
[431] See e.g. ESMA, 'Guidelines on Disclosure Requirements Applicable to Credit Ratings' (n 243).
[432] A Miglionico, 'The disclosure regime of credit rating agencies: an obscure veil of compliance?' (2019) 4 JBL 262, 281.
[433] D Weil et al, 'The effectiveness of regulatory disclosure policies' (2006) 25(1) J Policy Analysis Man 155, 156 and 175.
[434] Chiu, 'Regulatory Governance of Credit Rating Agencies in the EU' (n 323) 214.

to have infringed the Regulations intentionally or with gross negligence in a manner affecting the quality of the rating to which an investor has relied on, the investor bears the onus of proof; the requirements may force investors to engage in sufficient *ex ante* review of the structured product and the credit rating if they wish to ensure that the remedy is available to them at a later stage.[435]

4.7. The potential of soft law, if any

The preceding discussion has focused on market practices, initiatives and selected aspects of the legally binding regimes applicable to CMBS as rated instruments and credit rating agencies as the providers of ratings. However, an important aspect and element of the regulatory ecology has so far remained largely untouched.

The IOSCO Code of Conduct for CRAs was developed in response to the deficiencies in the CRA governance regime.[436] The Code is a soft law instrument and therefore, its enforcement is found on comply-or-explain model. In other words, the Code is a collection of non-binding standards and principles of conduct emanating from an international organisation the members of which have agreed on the norms amongst themselves.[437] Hence, in the case of IOSCO the parties who were involved in the drafting of IOSCO Principles subsequently incorporated into the Code of Conduct included primarily securities regulatory authorities.[438]

In contrast to EU rules, the Code of Conduct is an instrument with global scope, thus emphasising the nature of the said source of law as dynamic and flexible. However, in the aftermath of the 2008 financial crisis it was concluded that soft law instruments based largely on voluntary compliance were insufficient for the purpose of dealing with the issues that had emerged within credit rating markets, resulting inter alia in the introduction of the aforementioned CRA Regulations.[439] Still, some scholars have argued that the persisting failures of CRAs and credit ratings of structured products should be addressed by way of expanding the scope of the IOSCO Code in preference to implementing stronger regulatory response that would target ratings and securitisation markets through legally binding obligations.[440] For instance, it is arguable that amendments to the existing binding regime

---

[435] ibid 216.
[436] Chiu, ‘Regulating Credit Rating Agencies in the EU’ (n 52) 277.
[437] K Alexander, 'Global Financial Standard Setting, the G10 Committees, and International Economic Law' (2009) 34 Brook J Int'l L 861, 861; Hemraj (n 97) 71; the membership structure of IOSCO covers national securities regulators; other governmental regulators; and certain market participants.
[438] Hemraj (n 97) 74.
[439] Alexander (n 437) 862; Wittenberg (n 27) 671.
[440] Chiu, ‘Regulatory Governance of Credit Rating Agencies in the EU’ (n 323) 224.

would attribute credit ratings the characteristics of necessity goods which they supposedly are not.[441]

In broad terms, the Code of Conduct is founded upon four primary objectives: Ensuring quality and integrity of the rating process, securing independence of CRAs and managing conflicts of interest, enhancing the transparency and timeliness of rating disclosures and confidentiality maintenance.[442] These principles have since been incorporated also into the internal by-laws of Moody's, S&P and Fitch.[443] Whilst the relevant provisions outlined in the IOSCO Code bear relevance in connection with governance dimension of ESG, the instrument remains silent about the incorporation of ESG factors into the ratings of CMBSs. However, IOSCO has in other connections acknowledged the need to meet investor demand for sustainability-related information.

The most important ESG-related initiatives of IOSCO consist so far of the establishment of the Sustainable Finance Network and Sustainable Finance Task Force. Some of the more specific works include a Final Report on Sustainable Finance and the Role of Securities Regulators and IOSCO and the aforementioned collaboration with IFRS.[444] Whilst the Final Report outlines an ambition to produce case studies and analyses on disclosure of methods and governance of CRAs, in connection with the rating of structured products such as CMBSs, to date the organisation has only published a Consultation Paper on ESG rating agencies and thus, largely disregarded the role of traditional credit ratings in promoting sustainability within the international risk management system.[445] In addition, the role of the IOSCO and IFRS approach could be criticised on the basis that the organisations understand ESG only from the perspective of financial materiality and metrics which arguably represents a threat to the incorporation of long-term sustainability into capital markets; however, as stated earlier in this paper, such an approach is essential in order to incorporate ESG into credit ratings.[446] In addition, IOSCO too seems to prioritise the inclusion of

[441] ibid.
[442] IOSCO Code of Conduct (n 54) 1–2
[443] The internal governance regimes shall be disregarded as the discussion focusing on the IOSCO Code can be reflected against the by-laws as well. M Hemraj, 'Soft law regulation of the credit rating agencies' (2014) 35(1) Comp Law 10, 10.
[444] The Board of IOSCO (n 276).
[445] ibid 29; IOSCO, 'Environmental, Social and Governance (ESG) Ratings and Data Products Providers' (Consultation Report, July 2021) <www.iosco.org/library/pubdocs/pdf/IOSCOPD681.pdf> accessed 8 August 2021.
[446] C Adams and S Abhayawansa, 'Connecting the COVID-19 pandemic, environmental, social and governance (ESG) investing and calls for 'harmonisation' of sustainability reporting' (2021) Crit Perspect Account (forthcoming).

environmental and climate change dimension of ESG as opposed to embedding a more holistic approach to ESG.[447]

Nevertheless, as soft law constitutes an important regulatory aspect affecting the governance of credit rating agencies, its potential to expand to cover ESG credit risks could be explored. In contrast to positive law, soft law does not have judicially binding character. This characteristic contributes at least partially to the nature of soft law as nimble and reactive mainly because the implementation process is generally less cumbersome in contrast to the process of drafting legally binding instruments. In EU, this means that in addition to overcoming national legislative and political hurdles, the instrument has to go through the legislative process of EU as well.[448]

Furthermore, as soft law is relatively flexible concept and does not require full harmonisation with existing laws and regulations, in contrast to re-drafting selected instrument it might be possible to identify specific gaps that require addressing and introduce the required amendments on more selective basis.[449] Additionally, the pressure to make political compromises may reduce as addressing the interests of all participants and accounting for each legal tradition may not be as paramount a consideration in the context of soft law as it is in the process of enacting hard law.[450]

In light of this it has been proposed that international institutions, including IOSCO, should be attributed greater responsibility for exercising authority over financial institutions such as CRAs operating globally.[451] However, it is arguable that approaching the issue from an international soft law perspective is susceptible to the challenges that attach to international law more generally; these include the weakness, remoteness and opaqueness of such regimes.[452]

Whilst it might be possible to implement ESG considerations into the IOSCO Code of Conduct, this would arguably run counter to the legislative reforms taking place in the financial industry in terms of ESG as EU has introduced several ambitious initiatives with binding legal effect and hence, putting sustainability on a legal footing. An additional issue

[447] ibid.
[448] H Gabriel, 'The Use of Soft law in the Creation of Legal Norms in International Commercial Law: How Successful Has It Been' (2019) 40 Mich J Int'l L 413, 418 – 419.
[449] ibid 419.
[450] ibid.
[451] Andenæs and Chiu (n 223) 460.
[452] ibid.

relates to the manner in which CRAs have implemented the requirements of the IOSCO Code into practice. The three major rating agencies have, for instance, ruled out legal liability for breaches of their own by-laws by using limitation language. Hence, the institutions have largely shifted the responsibility to investors to conduct due diligence.[453]

Furthermore, the comply-or-explain model adopted in the IOSCO Code of Conduct faces challenges: First, the model requires active engagement from investors and other market participants. Second, if the content of the explanations given for non-compliance by CRAs is not addressed, it is possible to argue that the statements made by rating agencies are likely to be uninformative both in terms of their length and actual substance. This highlights the general inability of soft law to ensure sufficiently high degree of conformity to the desired norms.

In lieu the Securitisation Regulation could be expanded to include CMBSs within the scope of ESG-related articles. The approach should be preferred over options including the greater use of soft law because the IOSCO Code of Conduct is not generally concerned with ratings themselves, but rather with the governance of CRAs and the procedural aspects of rating. Hence, amending the Code of Conduct to the necessary extent might prove inappropriate as the approach would be likely to fail to embed the concept of ESG credit risk into the legally binding regimes and simply reinforce the role of self-governance regime and market discipline in relation to CMBSs ratings. Moreover, the issue might not be that the industry is lacking market-driven initiatives but rather that the approach founded on self-regulation falls short of addressing the pressing issues that underline the rating of ESG credit risk in CMBSs.

4.8. Summary of Part 4

Although market participants have begun to consider ESG both at the level of CMBS as financial instruments and at the level of rating these instruments, the applicable regimes contain gaps. Whilst ESMA has proved to be reluctant to amend the regimes with a view of addressing the lacunas, IOSCO as the international securities regulator has recognised that the demand for sustainability-related information is not currently being met.

Still, the UNPRI on ESG Incorporation in Securitised Products has found that 91 per cent of the respondents – including CRAs – have started to incorporate ESG factors systematically

[453] Hemraj (n 97) 87.

in their operations.[454] However, 68 per cent of the respondents were at the very early stages of doing so or had only developed internal scoring.[455] This seems to correspond with the findings presented in the above discussion: Whilst CRAs have recognised the materiality of ESG-related credit risk in the field of CMBSs, some dimensions of ESG lack proper recognition and legal footing. However, in relation to those ESG considerations that are more embedded into credit ratings, the persisting misconduct of CRAs compromise their relevance especially in relation to investor protection and the regulatory use of ratings in the EU prudential regime.

In view of the quasi-regulatory role of CRAs, it is doubtful whether it would be acceptable to remedy the resulting situation and approach the integration of ESG-related factors affecting credit quality solely by reinforcing ESG incorporation via soft law frameworks. This is particularly true in view of the EU-led campaign to promote the creation of legally binding framework governing ESG issues within the financial sector and capital markets. Further, the past experiences have indicated that the soft law regimes are partially insufficient measures to address the challenges related to credit ratings and CRAs. Given the recent findings of ESMA as to the persisting issues concerning the conduct of CRAs and the accuracy of credit ratings assigned to structured products, past failures of the gatekeepers should not be considered to be one-off occurrences; neither can issues relating to ESG credit risk in structured finance be ignored nor the business go on as usual.

If the economic system should be understood to reflect the broader social and economic circumstances and thus, considered to be responsive to the changes within the prevailing matrix of facts occurring in response to novel developments, then amending the regulatory approach to CMBSs and ratings assigned to them is justifiable and recommendable.[456] Alternatively, it might be necessary to re-evaluate the role of CRAs as gatekeepers and quasi-regulators altogether.[457]

5. Conclusions

The role of real estate in the economy and its effect on the financial system is significant. In addition, as this paper has shown, commercial real estate sector is distinctly exposed to ESG risks. For instance, within EU buildings have been found to be a major source of CO2

[454] UNPRI, 'ESG Incorporation into Securitised Products' (n 209) 16.
[455] ibid.
[456] L Reynolds, 'Foundations of an Institutional Theory of Regulation' (1981) 15(3) J Econ Issues 641.
[457] Kruck, *Private Ratings, Public Regulations* (n 41) ch 6.

emissions and real assets are also particularly vulnerable to transition and physical risks. Further, in terms of social sustainability, there is evidence that certain types of commercial properties adapt poorly to socially disruptive phenomena.

Therefore, commercial mortgage-backed securities – comprising of commercial real estate loans that have been pooled and either the asset portfolio or the credit risk associated with it is subsequently assigned to an insulated SSPE which issues tranches of different seniority – can provide an interesting perspective to the study of ESG as a credit risk from a legal viewpoint. This is because focusing on these particular structured products accommodates the simultaneous legal analysis of the interlinked concepts of securitisation, ESG and credit rating agencies, thus covering each dimension of ESG.

In view of this, the EU legislative framework is gradually becoming dominated by an objective to internalise sustainability and accommodate transition to a low-carbon, resource-efficient and circular economy. One of the most important goals set forth in the EU Commission Action Plan on Financing Sustainable Growth is to mainstream sustainability into risk management systems even though or exactly because sustainability related exposures are not always accounted for by the financial sector. This means that ESG should be explicitly incorporated into credit rating markets. Still, although ESMA in its role of the primary watchdog of rating agencies is expected to contribute towards the harmonious application of EU legislation and play a part in accomplishing the strategic goals of EU, the supervisory authority has categorically bypassed the opportunity to mandate credit rating agencies to account for relevant and material ESG exposures in credit ratings of structured products.

This approach is problematic in two respects. First, some of the underlying issues relating to credit rating agencies themselves call for a greater internalisation of especially the governance dimension of ESG. In spite of the measures taken to address the misconduct of CRAs and inaccurate ratings especially in the aftermath of the 2008 global financial crisis, certain challenges relating particularly to conflicts of interest, transparency and rating accuracy persist. This paper has argued that the combination of these often governance-related issues attaching to rating agencies; the relative novelty and fragmentation of ESG resulting in legal uncertainty; and the complexity of structured products such as CMBSs may have severe impact on the assessment of ESG as a credit risk in products which are the most vulnerable to these exposures, resulting in negative spill-over effects that extend across the financial sector and beyond.

Second, the regulatory framework applying to structured products fails to address ESG in a sufficiently comprehensive manner. Notably the simple, transparent and standardised securitisation label introduced in 2019 and including express provisions bearing relevance in terms of ESG does not apply to commercial mortgage-backed securities. Extending the scope of the label would arguably ensure that ESG is accounted for in the ratings of the said structured products in a manner which is systematic, transparent and harmonised without expressly interfering with the methodologies and analytical tools used by ratings agencies.

The discussion set forth in the preceding parts has attempted to illustrate the controversy between wider EU policy objectives, legal uncertainty pertaining to ESG and the failures of credit rating agencies as quasi-regulators and gatekeepers of capital markets. This paper has argued that credit rating agencies have been assigned a role of gatekeeper in a sense that the institutions vouche for the issuers of structured products by assigning a rating to the CMBS transaction. This alphabetical symbol supposedly addresses the information asymmetries between parties to the transaction because the rating agency with arguably weaker incentive to deceive other market participants has pledged its aggregated reputational capital. Further, in an age characterised by private public governance and decentralised regulation, credit rating agencies have assumed a regulatory role in capital markets. In addition, with regards CMBSs, an important example of the regulatory use of credit ratings and the quasi-regulatory role of rating agencies derive from EU prudential regime.

The objective of this paper has been the assessment of the role of ESG considerations that affect credit risk associated with commercial mortgage-backed securities. Based on the discourse that has been set forth it is concluded that whilst credit rating agencies recognise the concept of ESG credit risk, it remains largely unaddressed in the legally binding regimes applicable to CMBSs and the ratings assigned to these structured products. Hence, the instruments controlling rating agencies and the relevant products do not currently constitute a framework which accounts for ESG-related exposures in a systematic, harmonised and transparent manner.

This does not, however, mean that the internalisation of ESG into the ratings of commercial mortgage-backed securities is completely disregarded, but that the development is in its infancy. For instance, parties are increasingly utilising frameworks and guidance which align commercial real estate lending with sustainability targets. This could be seen as enhancing the overall quality of loans available for securitisation especially as it has been shown that ESG has a positive effect on the financial performance and position of an entity or an asset.

Moreover, credit rating agencies have themselves recognised the impact of ESG especially on cash flows and collateral quality in CMBSs and also implemented methodology which should be capable of addressing some of the relevant exposures. In addition, the general provisions of the Securitisation Regulation applying to all securitisations in EU contain some relevant rules targeting sustainability.

However, the unpredictability and severity of considerations affecting ESG credit risk in CMBSs relate firstly to the deficiencies in the manner in which CRAs apply their methodology and review ratings. Omitting the appliance of full methodology when conducting regular reviews raises concerns especially with regards the quality of the ratings and disclosures because applying divergent sets of methodology whilst using different and often unverified data against which the analytical tools are applied could result in inaccurate ratings being assigned to the products. Additionally, credit rating agencies continue to fail to disclose methodologies used in ratings even when binding legislation expressly requires them to do so. In light of the relatively scattered approach to ESG, this could prove particularly harmful.

Secondly, inaccurate ratings also have an effect on investors which may be subjects of prudential regulation partially relying on credit ratings. For example, certain groups of investors are not allowed to purchase non-investment grade instruments. If credit rating agencies have assigned a CMBS that is prone to ESG risks an inaccurate rating, the prudential safeguards become effectively inconsequential. Hence, given the novelty of ESG in the field of structured finance it is arguable that the role of rating agencies as gatekeepers is of emphasised importance and therefore, the institutions should exercise sufficient diligence in the rating of products that are particularly exposed to ESG-related risks.

Yet another issue relates to the nexus between proliferation of ESG and the lack of regulatory constraints capable of addressing misaligned interests between market participants. For example, as the market demand for sustainability grows stronger, issues such as sustainability washing might concurrently arise especially due to the weak regulatory governance of credit rating agencies. In this respect the duty of an investor to conduct due diligence prior to investing in a CMBS constitutes an important consideration. Thus, it is arguable that as sustainability reporting and disclosure regimes evolve in EU, both investors and credit rating agencies will be able to benefit from the advantages deriving from the availability of more standardised and transparent ESG-related data which CRAs can vet against information they receive from within the relevant party to the securitisation transaction.

This illustrates that the public interest associated with credit ratings and the market for commercial mortgage-backed securities is too great to be governed by regimes that are based on voluntary compliance and by-laws. Instead, with a view of addressing the issues relating to the rating of ESG credit risk in CMBSs, the Securitisation Regulation could be amended in order to reinforce the legislative and market-based controls without impeding the apparent independence and objectivity of credit ratings and the methodologies used to rate CMBSs under CRA Regulations I, II and III. However, on the basis of the discussion set forth in this paper it is possible to infer that credit rating agencies should be expressly mandated to account for ESG exposures in the ratings of the said structured products in order to align the risk management regime with wider policy objectives and ambitions. This is nothing less than fundamental in order to try and steer clear of a ghastly future.

Bibliography

Books

Andenæs M and Chiu I, *The foundations and future of financial regulation: governance for responsibility* (Routledge 2014)

Baum A and Hartzell D, *Real Estate Debt Markets* (Wiley-Blackwell 2011)

Barnard C and Peers S, *European Union Law* (OUP 2014)

Berle A and Means G, *The Modern Corporation and Private Property* (Macmillan 1932)

Blair M, *Ownership and Control: Rethinking Corporate Governance for the Twenty-first Century* (Brookings Institute 1995)

Cryer R et al, *Research Methodologies in EU and International Law* (Hart 2011)

Coffee J, *Gatekeepers: The Professions and Corporate Governance* (OUP 2006)

Finch V, *Corporate Insolvency Law* (2nd edn CUP, 2009)

Gullifer L and Payne J, *Corporate Finance Law: Principles and Policy* (3rd edn, Hart 2020)

Haentjens M and De Gioia-Carabellese P, *European banking and financial law* (2nd edn, Routledge 2020)

Hemraj M, *Credit Rating Agencies: Self-regulation, Statutory Regulation and Case Law Regulation in the United States and European Union* (1st edn, Springer 2015)

Kruck A, *Private Ratings, Public Regulations: Credit Rating Agencies and Global Financial Governance* (1st edn, Palgrave Macmillan 2011)

McCarthy J, *Climate Change 2001: Impacts, Adaptation, and Vulnerability* (CUP 2001)

Mellor M, *The Future of Money: From Financial Crisis to Public Resources* (Pluto Press 2010)

Mokal R, *Corporate Insolvency Law: Theory and Application* (1st edn OUP 2005)

Senanayake N, *Asset-backed Securitization and the Financial Crisis: The Product and Market Functions of Asset-backed Securitization: Retrospect and Prospect* (Diplomica Verlag 2010)

Sorey T and Pimor A, *Unlocking EU Law* (1st edn, Taylor & Francis 2018)

Sun W et al, *Finance and Sustainability: Towards a New Paradigm? A Post-Crisis Agenda* (Emerald Publishing 2011)

Wood P, *Law and Practice of International Finance* (1st edn, Sweet & Maxwell 1980)

Contributions to edited books

Aarnio A, *Oikeussäännösten tulkinta ja systematisointi* in Häyhä J (ed), *Minun metodini* (WSOY 1997)

Bilz K and Nadler J, *Law, Moral Attitudes, and Behavioural Change* in Zamir E and Teichman D (eds), *The Oxford Handbook of Behavioural Economics and the Law* (OUP 2014)

Castro D, *Commercial Mortgage-Backed Securities* in Strumeyer G (ed), *The Capital Markets: Evolution of the Financial Ecosystem* (John Wiley & Sons 2017)

Casu B and Sarkisyan A, *Securitisation* in Berger A *et al, The Oxford Handbook of Banking* (3rd edn, OUP 2019)

Creutzfeldt N, *Traditions of Studying the Social and the Legal* in Creutzfeldt N et al, *Routledge Handbook of Socio-Legal Theory and Methods* (1st edn, Routledge 2019)

D'Ecclesia R and Moriggia V, *Credit Rating Agencies* in Bertocchi M et al, Euro Bonds: *Markets, Infrastructure and Trends* (World Scientific Publishing Company 2013)

Eichholtz P et al, *Real Estate, Governance, and the Global Economic Crisis* in Hawley J et al (eds), *Corporate Governance Failures: The Role of Institutional Investors in the Global Financial Crisis* (University of Pennsylvania Press 2011).

Eichwald D, *Financing Real Estate - Concepts and Collateralisation* in Mütze M et al (eds), *Real Estate Investments in Germany* (2nd edn, Springer 2012)

Gunnigham N and Sinclair D, *Smart regulation* in Drahos P (ed), *Regulatory Theory* (ANU Press 2017

Juutilainen T, *EU Securitisation Regulation: legal ordering in symbiosis with transnational bodies* in Gamito M and Micklitz H, *The Role of the EU Transnational Legal Ordering: Standards, Contracts and Codes* (Edward Elgar 2020)

Munoz-Torres M and Rivera-Lirio J, *Sustainability Impact Assessment in ESAs* in Andenas M and Deipenbrock G (eds), *Regulating and Supervising European Financial Markets: More Risks than Achievements* (Springer 2016)

Pritchard A, *Corporate Governance, Capital Markets, and Securities Law* in Gordon J and Ringe WG (eds), *The Oxford Handbook of Corporate Law and Governance* (OUP 2015)

Whitehead C, *Debt and Corporate Governance* in Gordon and Ringe WG (eds), *The Oxford Handbook of Corporate Law and Governance* (OUP 2015)

Teubner G, *Global private regimes: Neo-spontaneous law and dual constitution of autonomous sectors?* in Ladeur K (ed), *Public Governance in the Age of Globalization* (1st edn, Routledge 2004)

Yearbooks

Van Den Brink T, The Impact of EU Legislation on National Legal Systems: Towards a new Approach to EU – Member State Relations (2017) 19 Camb Yearb Eur Leg Stud 211

Journal articles

Adams C and Abhayawansa S, ‘Connecting the COVID-19 pandemic, environmental, social and governance (ESG) investing and calls for ‘harmonisation’ of sustainability reporting’ (2021) Crit Perspect Account (forthcoming)

Alexander K, 'Global Financial Standard Setting, the G10 Committees, and International Economic Law' (2009) 34 Brook J Int'l L 861

An X et al, ‘What is Subordination About? Credit Risk and Subordination Levels in Commercial Mortgage-backed Securities (CMBS)’ (2015) 51 J Real Estate Finance Econ 231

An X and Pivo G, ‘Green Buildings in Commercial Mortgage-Backed Securities: The Effects of LEED and Energy Star Certification on Default Risk and Loan Terms’ (2020) 48(1) Real Estate Econ 7

Ashfroth B and Gibbs B, ‘The Double-Edge of Organizational Legitimation’ (1990) 1(2) Organ Sci 177

Battiston S et al, ‘A climate stress-test of the financial system’ (2017) 7(4) Nat Clim Change 283

Black J, 'Critical Reflections on Regulation' (2002) 27 Austl J Leg Phil 1

Bradshaw C, 'The Environmental Business Case and Unenlightened Shareholder Value' (2013) 33 Legal Stud 141

Bradshaw C et al, ‘Underestimating the Challenges of Avoiding a Ghastly Future’ (2021) 1 Front Conserv Sci

Brennan MJ et al, ‘Tranching and Rating’ (2009) 15(5) Eur Financial Manag 891

Broer T, ‘Securitisation bubbles: Structured finance with disagreement about default risk’ (2018) 127(3) J Financ Econ 505

Cash D, ‘Credit rating agencies and environmental, social and governance considerations: a long road ahead’ (2017) 3 IBLJ 281

Chiu I, ‘Regulating Credit Rating Agencies in the EU: In Search of a Coherent Regulatory Regime’ (2014) 25(2) Eur Bus Law Rev 269

Chiu I, ‘Regulatory Governance of Credit Rating Agencies in the EU: The Perils of Pursuing the Holy Grail of Rating Accuracy’ (2013) 4 Eur J Risk Reg 209

Chiu I, ‘Regulatory reforms towards promoting sustainable finance’ (2018) 39(11) Comp Law 349

Claringbould D et al, 'Sustainable finance: the European Union's approach to increasing sustainable investments and growth – opportunities and challenges' (2019) 88(2) Vierteljahrshefte zur Wirtschaftsforschung 11

Coffee J, 'Understanding Enron: It's about the Gatekeepers, Stupid' (2002) 57 Bus Law 1403

Cort T and Esty D, 'ESG Standards: Looming Challenges and Pathways Forward' (2020) 33(4) Organ Environ 491

Craske M, 'Made Simple' (2018) 37 Int'l Fin L Rev 53

Deipenbrock G, 'Direct Supervisory Powers of the European Securities and Markets Authority (ESMA) in the Realm of Credit Rating Agencies – Some Critical Observations in a Broader Context' (2018) 29(2) Eur Bus Law Rev 169

De Pascalis F, 'Investors' and Market Participants' Over-Reliance on External Credit Ratings: To What Extent Does EU Law Carry This Risk?' (2016) 27(3) EBL Rev 353

Devalle A et al, 'The linkage between ESG Performance and Credit Ratings: A Firm-level Perspective Analysis' (2017) 12(9) Int J Bus Manag 53

Efing M and Hau H, 'Structured debt ratings: Evidence on conflict of interest' (2015) 116 J Financ Econ 46

Eichholz P et al, 'Environmental performance and the cost of debt: Evidence from commercial mortgages and REIT bonds' (2019) 102 J Bank Financ 19

Eichholtz P et al, 'Doing Well by Doing Good? Green Office Buildings' (2010) 100(5) Am Econ Rev 2492

Eichholtz P et al, 'Portfolio greenness and the financial performance of REITs' (2012) 31(7) J Intl Money Finance 1911

Eliwa Y et al, 'ESG practices and the cost of debt: Evidence from EU countries' Crit Perspect Account (forthcoming)

Finch V, 'Corporate Rescue in a World of Debt' (2008) 8 JBL 756

Fox M, 'Gatekeeper Failures: Why Important, What to Do' (2008) 106(6) Mich L Rev 1089

Gabriel H, 'The Use of Soft law in the Creation of Legal Norms in International Commercial Law: How Successful Has It Been' (2019) 40 Mich J Int'l L 413

Ganguly G et al, 'If at First You Don't Succeed: Suing Corporations for Climate Change' (2018) 38(4) Oxf J Leg Stud 841

Grabbe L et al, 'Recent Developments in Corporate Finance' (1990) 76 Fed Res Bull 593

Gubler Z, 'Regulating in the Shadows: Systematic Moral Hazard and the Problem of the Twenty-First Century Bank Run' (2012) 63(2) Ala L Rev 221

Hemraj M, ’Soft law regulation of the credit rating agencies’ (2014) 35(1) Comp Law 10

Hurd G, ‘Real Estate Bonds as an Investment Security’ (1920) 88 Ann Am Acad Pol Soc Sci 79

Hyland M et al, ‘The value of domestic building energy efficiency — evidence from Ireland’ (2013) 40 Energy Econ 943

Jensen M and Meckling W, ‘Theory of the firm: Managerial behaviour, agency costs and ownership structure’ (1976) 3 J Financ Econ 305

Kahn F, 'Transparency and Accountability: Rethinking Corporate Fiduciary Law's Relevance to Corporate Disclosure' (2000) 34 Ga L Rev 505

Keay A, ‘Stakeholder Theory in Corporate Law: Has it Got What It Takes?’ (2010) 9 Rich J Global L & B 249

Kempeneer S et al, ‘Bringing the User Back in the Building: An Analysis of ESG in Real Estate and a Behavioral Framework to Guide Future Research’ (2021) 13(6) Sustainability 1

Kiesel F and Lücke F, ‘ESG in credit ratings and the impact on financial markets’ (2019) 28(3) Financ Mark Inst Instrum 263

Klein P et al,’ Transparency as a remedy for agency problems in securitization? The case of ECB’s loan-level reporting initiative’ (2021) 46 J Financ Intermed 1000853

Kraakman R, ‘Gatekeepers: The Anatomy of Third-Party Enforcement Strategy’ (1986) 2 J L Econ & Org 53

Kruck A, ‘Asymmetry in Empowering and Disempowering Private Intermediaries: The Case of Credit Rating Agencies’ (2017) 670(1) Ann Am Acad Pol Soc Sci 133

Kumpan C, ‘Conflicts of Interest in Securitisation: Adjusting Incentives’ (2009) 9 J Corp L Stud 261

Lin C et al, ‘The Effects of Corporate Governance on Credit Ratings: The Role of Corporate Social Responsibility’ (2020) 56(5) Emerg Mark Finance Trade 1093

Lagner T and zu Knyphausen-Aufseß D, ‘Rating Agencies as Gatekeepers to the Capital Market: Practical Implications of 40 Years of Research’ (2012) 21(3) Financ Mark Inst Instrum 157

La Porta R et al, ‘Investor protection and corporate governance’ (2008) 58(1) JFE 3

Lee AL, ‘Credit rating agencies – do they adequately fulfil their gatekeeper role in debt capital markets?’ (2015) JIBLR 30(2) 82

Legind N and Jensen C, ‘The European Regulation of Credit Rating Agencies’ (2014) 30(30) Intl J Law Context 114

Lessig L, ’The New Chicago School’ (1998) 27 J Legal Stud 661
Lovegrove S et al, ‘ESG regulation: international developments’ (2021) 184 COB 1
Lynch T, ‘Deeply and Persistently Conflicted Credit Rating Agencies in the Current Regulatory Environment' (2009) 59 Case W Res L Rev 227
Marsland-Shaw L, ‘Evaluating an asset-backed transaction’ (1991) JIBL 6(2) 64
Martynova M and Renneboog L, ‘The Performance of the European Market for Corporate Control: Evidence from the Fifth Takeover Wave’ (2011) 17(2) EFMA 208
McConnell J and Buser S, ‘The Origins and Evolution of the Market for Mortgage-Backed Securities’ (2011) 3 Annu Rev Finance Econ 173
Michelon G, ‘CSR reporting practices and the quality of disclosure: An empirical analysis’ (2015) 33 Crit Perspect Account 59
Miglionico A, ‘The disclosure regime of credit rating agencies: an obscure veil of compliance?’ (2019) 4 JBL 262
Modigliani F and Miller M, ‘The Cost of Capital, Corporation Finance and the Theory of Investment’ (1958) 48(3) Am Econ Rev 261
Munoz D, ‘In praise of small things: securitization and governance structure’ (2010) 5(4) Cap Mark Law J 363
Nazari J et al, ‘Assessing social and environmental performance through narrative complexity in CSR reports’ (2017) 13(2) J Contemp Account Econ 166
Osofsky H, ‘The Continuing Importance of Climate Change Litigation’ (2010) 1 Climate L 3
Park S, 'Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution' (2018) 54 Stan J Intl L 1
Partnoy F, ‘Rethinking regulation of credit-rating agencies: an institutional investor perspective’ (2010) 25(4) JIBLR 188
Pinto J and Alves A, ‘The economics of securitization: Evidence from the European markets’ (2016) 13(1) Invest Manag Financial Innov 112
Pound R, ‘Law in Books and Law in Action’ (1910) 44 Am L Rev 12
Rajapakse P, ‘An Analysis of the Concept of Mortgage-Backed Securities: An Economic and Legal Perspective’ (2011) 10(1) JLFM 1
Redford K and Adams W, ‘Payment for Ecosystem Services and the Challenge of Saving Nature’ (2009) 23(4) Conserv Biol 785
Reynolds L, ‘Foundations of an Institutional Theory of Regulation’ (1981) 15(3) J Econ Issues 641

Shleifer A and Vishny R, ‘A Survey of Corporate Governance’ (1997) 52(2) J Finance 737
Stellner K and Zwergel B, ‘Corporate social responsibility and Eurozone corporate bonds: The moderating role of country sustainability’ (2015) 59 J Bank Financ 538
Solomon D, 'The Rise of a Giant: Securitization and the Global Financial Crisis’ (2012) 49 Am Bus LJ 859
Solomon J and McCluskey W, ‘Commercial mortgage backed securities: resurgence or demise’ (2010) 28(6) JPIF 398
Tilba A and Reisberg A, ‘Fiduciary duty under the Microscope: Stewardship and the Spectrum of Pension Fund Engagement’ (2019) 82(3) MLR 456
Titman S and Tsyplakov S, ‘Originator Performance, CMBS Structures, and the Risk of Commercial Mortgages’ (2010) 23(9) Rev Financ Stud 3558
von Reden H, ‘Regulation of securitised products post the financial crisis’ (2013) 2(1) UCL JL and J 112
Walker N, ‘Legal Theory and the European Union: A 25th Anniversary Essay’ (2005) 25 Oxf J Leg Stud 581
Weber O et al, ‘Incorporating Sustainability Criteria into Credit Risk Management’ (2010) 19 Bus Strat Env 39
D Weil et al, ‘The effectiveness of regulatory disclosure policies’ (2006) 25(1) J Policy Analysis Man 155
White L, ‘Markets: The Credit Rating Agencies’ (2010) 24(2) J Econ Perspect 211
Wittenberg T, ‘Regulatory Evolution of the EU Credit Rating Agency Framework’ (2015) 16 Eur Bus Org Law Rev 669
Worthington H and Judd V, ‘Can the Sustainability Linked Loan Deliver Lasting Chance?’ (2021) 138(2) Banking L J 103

Research papers

Bougheas S, ‘Pooling, tranching, and credit expansion’ (April 2014) 66(2) Oxford Economic Papers 557
Cullen J et al, ‘Financing the Transition to Sustainability’ (6 May 2020) LSN Research Paper Series No 20-09
Haar B, ‘Civil Liability of Credit Rating Agencies after CRA 3 – Regulatory All-or-Nothing Approaches between Immunity and Over-Deterrence’ (2013) University of Oslo Faculty of Law Legal Studies Research Paper Series No 2013-02
Rock E, ‘Institutional Investors in Corporate Governance’ (2014) University of Pennsylvania Law School, Institute for Law and Economics Research Paper No 14-37

Sjåfjell B and Taylor M, 'Planetary Boundaries and Company Law: Towards a Regulatory Ecology of Corporate Sustainability' (2015) University of Oslo Faculty of Law Legal Studies Research Paper Series No 2015-11

EU material

Commission communications

Commission, 'Action Plan: Financing Sustainable Growth'(Communication) COM (2018) 97 final

Commission, 'A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives' (Commication) COM(2020) 662 final

Commission, 'A Sustainable Europe for a Better Word: A European Union Strategy for Sustainable Development' (Communication) COM(2001) 264 final

Commission, 'Fit for 55: delivering the EU's 2030 Climate Target on the way to climate neutrality'(Communication) COM(2021) 550 final

Commission, 'Communication from the Commission on Credit Rating Agencies' COM(2006) OJ C 59/02

Commission, 'Impact assessment accompanying the document communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions: Stepping up Europe's 2030 climate ambition' (Communication) COM(2020) 562

Other Commission material

Commission, 'Building a Capital Markets Union' COM (2015) 63 final

Commission, 'Draft Report by Subgroup 4: Social Taxonomy' (Platform on Sustainable Finance, July 2021) <https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/sf-draft-report-social-taxonomy-july2021_en.pdf> accessed 14 July 2021

Commission, 'Energy efficiency in buildings' (17 February 2021) <https://ec.europa.eu/info/sites/default/files/energy_climate_change_environment/events/documents/in_focus_energy_efficiency_in_buildings_en.pdf> accessed 19 August 2021

Recommendations

ESRB, Recommendation No ESBR/2016/14 of 31 October 2016 on closing real estate data gaps [2017] OJ C 31/1

Commission, Recommendation No 2014/135/EU of 12.3.2014 on a new approach to business failure and insolvency' COM (2014) OJ L 74

Decisions and public notices of the Board of Supervisors

Board of Supervisors, 'Decision to adopt supervisory measure and impose fines with respect infringements by Moody's Deutschland GBH and Moody's Investor Service Limited' (23 May 2017) <www.esma.europa.eu/sites/default/files/library/esma41-137-1005_decision_of_the_board_of_supervisors_to_adopt_a_supervisory_measure_and_impose_fines_with_respect_to_infringements_by_moodys_deutschland_gmbh_and_moodys_investors_service_limited.pdf> accessed 20 August 2021

Board of Supervisors, 'Decision to adopt supervisory measures and impose fines in respect of infringements committed by Moody's UK' (Decision 2021/1, 23 March 2021) <www.esma.europa.eu/sites/default/files/library/esma41-356-114_decision_1-2021_moodys_uk.pdf> accessed 20 August 2021

ESMA, 'Public Notice' (1 June 2017) <www.esma.europa.eu/sites/default/files/library/esma71-99-478_public_notice_moodys_germany_and_moodys_united_kingdom.pdf> accessed 20 August 2021

EU supervisory authorities' material

EIB, 'Building a smart and green Europe in the COVID-19 era' (EIB Investment Report 21 January 2021) <www.eib.org/en/publications/investment-report-2020> accessed 13 August 2021

Committee on Economic and Monetary Affairs, 'Report on the proposal for a regulation of the European Parliament and of the Council laying down common rules on securitisation and creating a European framework for simple, transparent and standardised securitisation and amending Directives 2009/65/EC, 2009/138/EC, 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012' COM(2015) 0472

EBA, 'EBA Action Plan on Sustainable Finance' (6 December 2019) <www.eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf> accessed 24 June 2021

EBA, 'EBA Report on management and supervision of ESG risks for credit institutions and investment firms' (2021) <www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Reports/2021/1015656/EBA%20Report%20on%20ESG%20risks%20management%20and%20supervision.pdf> accessed 17 August 2021

EBA, 'Report on STS Framework for Synthetic Securitisation under Article 45 of Regulation (EU) 2017/2402' (6 May 2020)

<www.eba.europa.eu/sites/default/documents/files/document_library/News%20and%20Press/Press%20Room/Press%20Releases/2020/EBA%20proposes%20Framework%20for%20STS%20Synthetic%20Securitisation/883430/Report%20on%20framework%20for%20STS%20syntetic%20securitisation.pdf> accessed 1 July 2021

ECB, 'Guide on climate-related and environmental risks: Supervisory expectations relating to risk management and disclosure' (November 2020) <www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks~58213f6564.en.pdf> accessed 27 June 2021

ESAs, 'Joint Committee Report on the implementation and functioning of the Securitisation Regulation (Article 44)' (17 May 2021) <www.esma.europa.eu/sites/default/files/library/jc_2021_31_jc_report_on_the_implementation_and_functioning_of_the_securitisation_regulation_1.pdf> accessed 1 August 2021

ESAs, 'Taxonomy-related sustainability disclosures: Draft regulatory technical standards with regard to the content and presentation of sustainability disclosers pursuant to Article 8(4), 9(5) and 11(5) of Regulation (EU) 2019/2088' (Joint Consultation Paper, 15 March 2021) <www.esma.europa.eu/sites/default/files/library/jc_2021_22_-_joint_consultation_paper_on_taxonomy-related_sustainability_disclosures.pdf> accessed 23 August 2021

ESMA, 'Credit Rating Agencies: ESMA's investigation into structured finance ratings' (16 December 2014) <www.esma.europa.eu/sites/default/files/library/2015/11/esma-2014-1524_cra_public_report_on_sf_u_investigation.pdf > accessed 20 July 2021

ESMA, 'ESMA Technical Advice to the European Commission on Sustainability Considerations in the credit rating market' (18 July 2019) <www.esma.europa.eu/sites/default/files/library/esma33-9-321_technical_advice_on_sustainability_considerations_in_the_credit_rating_market.pdf> accessed 12 July 2021

ESMA, 'Guidelines on Disclosure Requirements Applicable to Credit Ratings' (Final Report, 18 July 2019) <www.esma.europa.eu/sites/default/files/library/esma33-9-320_final_report_guidelines_on_disclosure_requirements_applicable_to_credit_rating_agencies.pdf> accessed 30 June 2021

ESMA, 'Guidelines on Disclosure Requirements for Initial Reviews and Preliminary Ratings' (Consultation Paper, 26 May 2021) <www.esma.europa.eu/sites/default/files/library/esma_33-9-

413_consultation_paper_on_disclosure_requirements_for_initial_reviews_and_preliminary_ratings.pdf> accessed 28 June 2021

ESMA, ‘Report on CRA Market Share Calculation’ (14 December 2020) <www.esma.europa.eu/sites/default/files/library/esma_33-9383_cra_market_share_calculation_2020_0.pdf> accessed 18 August 2021

Other EU material

Delivorias A, ‘Synthetic securitisation: A closer look’ (European Parliament Research Service Briefing June 2016) <www.europarl.europa.eu/RegData/etudes/BRIE/2016/583848/EPRS_BRI%282016%29583848_EN.pdf> accessed 24 June 2021

The HLEG, ‘Financing a Sustainable European Economy’ (Final Report, 2018) <https://ec.europa.eu/info/sites/default/files/180131-sustainable-finance-final-report_en.pdf> accessed 9 June 2021

The HLEG, ‘Financial Supervision in the EU’ (The de Larosière Group Report) (25 February 2009) <https://ec.europa.eu/economy_finance/publications/pages/publication14527_en.pdf> accessed 16 July 2021

Reports

Walker D, ‘A Review of Corporate Governance in Banks and Financial Institutions: Final Recommendations’ (Walker Review) (26 November 2009) <https://webarchive.nationalarchives.gov.uk/+/www.hm-treasury.gov.uk/d/walker_review_261109.pdf> accessed 16 July 2021

International organisations

IOSCO material

Code of Conduct Fundamentals for Credit Rating Agencies (Final Report, IOSCO March 2015) <www.iosco.org/library/pubdocs/pdf/IOSCOPD482.pdf> accessed 1 July 2021

IOSCO, ‘Environmental, Social and Governance (ESG) Ratings and Data Products Providers’ (Consultation Report, July 2021) <www.iosco.org/library/pubdocs/pdf/IOSCOPD681.pdf> accessed 8 August 2021

The Board of IOSCO, ‘Sustainable Finance and the Role of Securities Regulators and IOSCO’ (Final Report, April 2020) <www.iosco.org/library/pubdocs/pdf/IOSCOPD652.pdf> accessed 12 July 2021

Technical Committee of the IOSCO, ‘Final report on the role of credit rating agencies in structured finance markets’ (IOSCO May 2008) <www.iosco.org/library/pubdocs/pdf/IOSCOPD270.pdf> accessed 18 August 2021

Other international material

Basel Committee on Banking Supervision, ‘Climate-related financial risks – measurement of methodologies’ (BIS April 2021) <www.bis.org/bcbs/publ/d518.pdf> accessed 1 June 2021

Basel, ‘Climate-related risk drivers and their transmission channels’ (BIS April 2021) <www.bis.org/bcbs/publ/d517.pdf> accessed 1 June 2021

Boffo R and Patalano R, ‘ESG Investing: Practices, Progress and Challenges’ (OECD 2020) <www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf> accessed 25 June 2021

Fender I and Mitchell J, ‘The future of securitisation: How to align incentives?’ (September 2009) BIS Quarterly Review <www.bis.org/publ/qtrpdf/r_qt0506f.pdf> accessed 20 June 2021

Fender I and Mitchell J, ‘Structured finance: complexity, risk and the use of ratings’ (June 2005) BIS Quarterly Review <www.bis.org/publ/qtrpdf/r_qt0506f.pdf> accessed 20 June 2021

IFRS Foundation, ‘Consultation Paper on Sustainability Reporting’ (September 2020) <www.ifrs.org/content/dam/ifrs/project/sustainability-reporting/consultation-paper-on-sustainability-reporting.pdf> accessed 20 August 2021

IPCC Working Group I, ‘Climate Change 2021: The Physical Science Basis’ (Contribution to the Sixth Assessment Report, 7 August 2021) <www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf> accessed 12 August 2021

‘Who Cares Wins: Connecting Financial Markets to a Changing World’ (International Finance Corporation 2004) <https://documents1.worldbank.org/curated/en/280911488968799581/pdf/113237-WP-WhoCaresWins-2004.pdf> accessed 12 August 2021

UN material

Brundtland G, ‘Report of the World Commission on Environment and Development: Our Common Future’ (1987) UNGA Doc A/42/427

Bosteels T and Sweatman P, ‘Sustainable real estate investment: Implementing the Paris Climate Agreement: An Action Framework’ (UNEP FI, February 2016) <www.unepfi.org/fileadmin/documents/SustainableRealEstateInvestment.pdf > accessed 12 July 2021

UNGA, ‘Report of the United Nations Conference on Environment and Development: Rio Declaration on Environment and Development’ (12 August 1992) A/CONF.151/26

UNPRI, ‘ESG incorporation into securitised products: the challenges ahead’ (5 May 2021)

UNPRI, ‘Statement on ESG in credit risk and ratings’ <www.unpri.org/credit-risk-and-ratings/statement-on-esg-in-credit-risk-and-ratings-available-in-different-languages/77.article> accessed 27 July 2021

UNPRI, ‘Statement on ESG in credit risk and ratings’ <www.unpri.org/credit-risk-and-ratings/statement-on-esg-in-credit-risk-and-ratings-available-in-different-languages/77.article> accessed 20 August 2021

Newspaper articles

Ho Prudence, ‘Rating agencies boost ESG risk analysis’ *Reuters* (18 November 2019) <www.reuters.com/article/rating-agencies-boost-esg-risk-analysis-idUSL8N27Y2DE> accessed 24 June 2021

Web resources

Conduit T and Tinsley I, ‘Implications of sustainability and ESG for the securitisation market’ (Allen & Overy, April 2021 <www.allenovery.com/en-gb/global/news-and-insights/publications/implications-of-sustainability-and-esg-for-the-securitisation-market> accessed 25 June 2021

‘European Property market Outlook: Q2 2021’ (Aberdeen Standard Investments 2021) <www.aberdeenstandard.com/docs?editionId=db3843cc-e061-4d70-9ff6-c183a77a678b> accessed 13 August 2021

‘Europe: Real Estate Investment in Q3 2020’ (CBRE 2021) <http://cbre.vo.llnwd.net/grgservices/secure/CBRE%20EMEA%20Investment%20Snapshot%202020Q3_8v8z.pdf?e=1628848800&h=5f9cf853e8c2477d917f98d98ce6b8d4> accessed 13 August 2021

Gujral V et al, ‘Commercial real estate must do more than merely adapt to coronavirus’ (McKinsey & Company 9 April 2020) <www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/commercial-real-estate-must-do-more-than-merely-adapt-to-coronavirus> accessed 15 July 2021

Mitchell M et al, ‘The ESG Pulse: A Spotlight on Structured Finance (S&P, 28 April 2021) <www.spglobal.com/ratings/en/research/articles/210428-the-esg-pulse-a-spotlight-on-structured-finance-11928102> accessed 25 June 2021

‘What Is ESG Integration?’ (UNPRI, 25 April 2018) <www.unpri.org/ investor-tools/what-is-esg-integration/3052.article> accessed 6 July 2021

Blogs

Dawuda Sidiq, ‘Linking Climate Transition Risks and Credit Risks’ (*S&P Global*, 21 October 2020) <www.spglobal.com/marketintelligence/en/news-insights/blog/linking-climate-transition-risks-and-credit-risks> accessed 8 July 2021

Sindaco Marco, ‘The Evolution of ESG Risk in Credit Risk Assessment’ (*S&P Global*, 27 October 2020) <www.spglobal.com/marketintelligence/en/news-insights/blog/the-evolution-of-esg-factors-in-credit-risk-assessment> accessed 6 July 2021

Sindaco Marco, ’The Evolution of ESG Factors in Credit Risk Assessment: Social Issues’ (*S&P Global*, 31 March 2021) <www.spglobal.com/marketintelligence/en/news-insights/blog/the-evolution-of-esg-factors-in-credit-risk-assessment-social-issues> accessed 11 July 2021

Singh Shilpi and Vanzellotti Taiana, ‘Sustainability-Linked Loans 2021: The COVID-19 Effect, ESG Ratings & Continued Popularity’ (*Sustainalytics*, 15 April 2021) <www.sustainalytics.com/esg-research/resource/corporate-esg-blog/sustainability-linked-loans-2021-the-covid-19-effect-esg-ratings-continued-popularity> accessed 24 June 2021

Other secondary sources

Amariei C, ‘Fostering Institutional Investment in Europe’s Capital Markets: Reality vs. Expectations’ (2nd Interim Report of the CEPS-ECMI Task Force on Asset Allocation in Europe, 14 June 2018)

‘CMBS Large Loan Rating Criteria’ (Criteria Report, Fitch Ratings 10 April 2020)

‘Commentary on ESG Factors in CMBS’ (DBRS Morningstar, 8 February 2021)

DBRS Morningstar Criteria: Approach to Environmental, Social and Governance Risk Factors in Credit Ratings’ (DBRS Morningstar February 2021) <www.dbrsmorningstar.com/research/373262/dbrs-morningstar-criteria-approach-to-environmental-social-and-governance-risk-factors-in-credit-ratings> accessed 1 August 2021

‘ESG in Credit’ (White Paper, Fitch Ratings 2020) <https://your.fitch.group/rs/732-CKH-767/images/Fitch%20Ratings%20-

%20ESG%20In%20Credit%202020.pdf?mkt_tok=eyJpIjoiT0dJd09UVTBNbVV3TXpObCIsInQiOiJCNlBlaFdaYjg4M1hTRzVQZHFyRmZiRzE4a1JibW9VdVwveHE4SWpHNWQ2YzJEVU1BdWEzdmdxR1wvUkhMOWhkT1dpYXJzbkVJenJpTVNFKytLOVh1cHljMGFUYjg1Wmp5a0dVamFrOWxjT0xYWTd0RDlFUUdvS3Z3Zmxhck5TVHJlUndSK21TSXpQczVRbmIyZ21xTVM3QT09In0%3D> accessed 12 July 2021

'EMEA CMBS and CRE Loan Rating Criteria' (Criteria Report, Fitch Ratings 12 June 2020)

'European CMBS Methodology and Assumptions' (Criteria, S&P Ratings Services 7 November 2021) <www.maalot.co.il/Publications/MT20150111122815.pdf> accessed 5 June 2021

'Guide to Credit Rating Essentials' (S&P Global Ratings, 2018) <www.spratings.com/documents/20184/774196/Guide_to_Credit_Rating_Essentials_Digital.pdf> accessed 28 June 2021

'Guidance on the application of the Green Loan Principles in the real estate finance (REF) lending context: Retrofit Projects' (LMA, October 2020) <www.lma.eu.com/application/files/9116/0552/7477/02_LMA_Case_Study_REF_Investment_Retrofit_V05.pdf> accessed 21 June 2021

'Guidance on the application of the Green Loan Principles in the real estate finance (REF) investment lending context: Green buildings' (LMA, October 2020) <www.lma.eu.com/application/files/2316/0552/7456/01_LMA_Case_Study_REF_Investments_Green_Buildings_V06.pdf>, accessed 21 June 2021

'How Management & Governance Risks and Opportunities Factor into Global Corporate Ratings' (S&P Global Ratings 7 November 2018) <www.spglobal.com/_Assets/documents/How-Management-Governance-Risks-Opportunities-Factor-Into-Global-Corporate-Ratings-Nov-7-2018.pdf> accessed 18 July 2021

Lafakis C et al, 'The Economic Implications of Climate Change' (Analysis, Moody's June 2019) <www.moodysanalytics.com/-/media/article/2019/economic-implications-of-climate-change.pdf> accessed 10 June 2021

'S&P Global Ratings Definitions' (S&P Global Ratings, 18 August 2016) <www.maalot.co.il/Publications/GMT20160823145849.pdf> accessed 13 August 2021

'Sustainability Linked Loan Principles' (Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association, May 2021) <www.lma.eu.com/application/files/8416/2210/4806/Sustainability_Linked_Loan_Principles.pdf> accessed 1 June 2021